

JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

DX-MX90BK CA-MX90BK (UNIT No. AX-MX90BK)



* For instruction manual, please refer to the CA-MX90BK(SM.NO.20267) or DX-MX90BK(SM.NO.20268).

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Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

5. Leakage current check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).

• Alternate check method

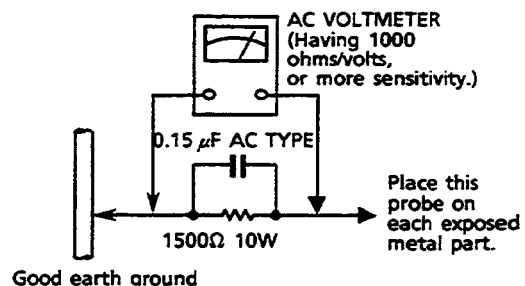
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor.

Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).

This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Technical Explanations

■ AV Compu Link

1 Description

AV Compu Link is a system to simplify A/V equipment operation that has been complicated and troublesome with systematization of A/V components. Take note that A/V Compu Link system is different from conventional "COMPU LINK-1" and "AV control" systems employed in some of video equipment. So, do not use "COMPU LINK-1 SYNCHRO" terminals and ordinary AV control terminal for connection.

2. Signal of AV Compu Link

(1) Status information (new format)

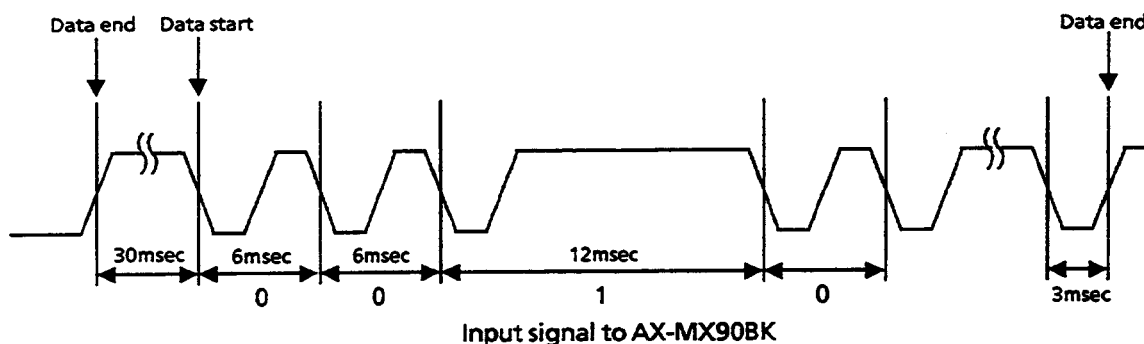
AX-MX90BK receives necessary data about change in state from VCR as input of status information.

Input data is composed of 8 bits of which upper 3 bits are for equipment code and lower 5 bits are for status information.

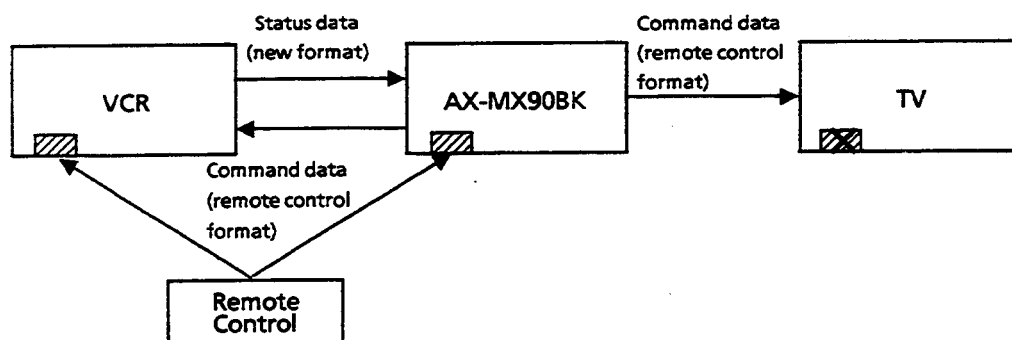
On the other hand, AX-MX90BK outputs command data to VCR and TV through remote control cord (JVC standard).

(2) Specifications of status signal

See the figures below.



- 1) Transmission of new data is started (Data start) more than 30 msec after the rise of previous Data end.
- 2) Data 0 : 6 msec
Data 1 : 12 msec
- 3) End of data (DATA END) is at the rise of the 9th pulse.



Note: Take note that TV's remote sensor is inactivated when the AV Compu Link terminal is in connection, and the TV is controlled by signal that amplifier receives.

■ Air-cooling Fan

1. Outline

By using an air blower with a motor in the AX-MX90BK, the heat sink has been made smaller and high power has been achieved in a compact format. The air blower rotates with a 2-step speed according to the music signal level. The rise of the temperature in the heat sink is detected by a thermistor, and if the temperature becomes abnormal, the speaker relay is switched off.

2. Operation principal

The music signal level detected by the A/D converter (IC906) is input to the microcomputer, and the fan motor is driven with a 2-step speed according to that signal level. The temperature of the heat sink is detected by the resistance value of the thermistor (SR500), and is input to the A/D converter (IC906).

3. Fan operation (standard value)

- ① The fan rotates at low speed when the speaker output continues for 1 minute or more (continuously more than 4V or at a music peak above 10V).
- ② The fan rotates at high speed when the condition of ① continues for more than 1 minute.
- ③ When the signal detection is turned off while the fan is rotating, the fan will be stopped after 1 minute.
- ④ The fan rotates at low speed when the thermistor temperature becomes 80 degrees.
- ⑤ The fan rotates at high speed when the temperature keeps 80 degrees for 1 minute or more.
- ⑥ When condition ② continues, the rotation is stopped for 7 Seconds after 30 minutes and, thereafter, high speed rotation will continue.

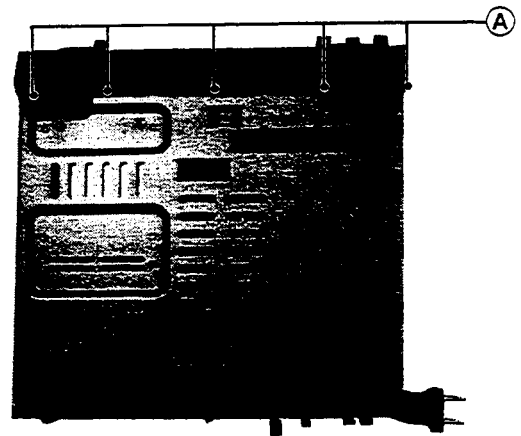
■ Check of Fan Motor Rotation

- ① Short-circuit between collector and emitter of Q507.
- ② Short-circuit between collector and emitter of Q506.

Disassembly Procedures

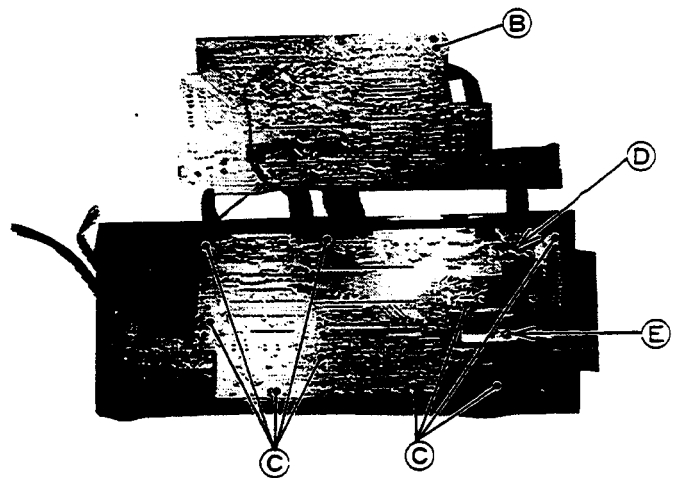
■ Removing the Top Cover

1. Remove the screw on each side and the 4 screws on the rear side.
2. Pull the top cover slightly backward and lift it while spreading the backs of the left and right sides to remove it.



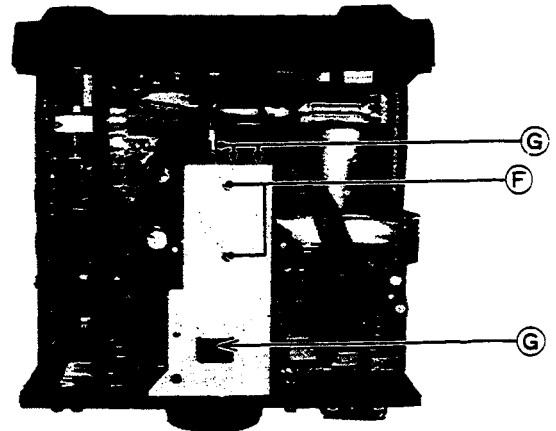
■ Removing the Front Panel

1. Remove the top cover.
2. Remove the 4 small volume knobs and main volume knob.
3. Remove the nut fixing a shaft of main volume to front panel.
4. Remove 5 screws A fixing bottom of the front panel.



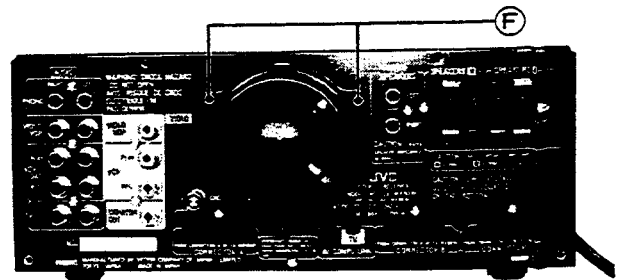
■ Removing the Front P.C.Board

1. Remove the front panel.
2. Remove the JOG dial knob.
3. Remove the 3 hooks fixing upper side circuit board B, then lift the circuit board up.
4. Remove the 10 screws C fixing lower side circuit board D and 1 screw E fixing small circuit board.



■ Removing the Front P.C.Board

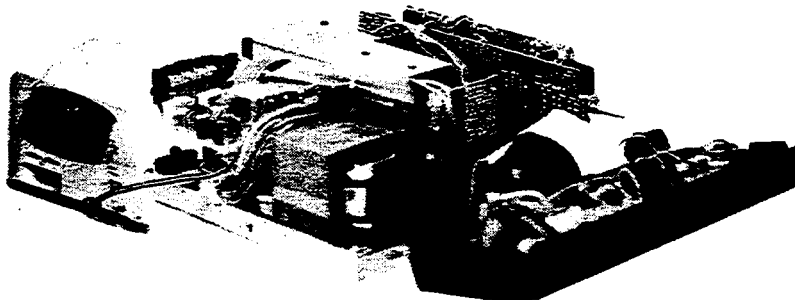
1. Remove the top cover.
2. Remove the 4 screws F fixing the bracket.
3. Remove the 4 screws G fixing the heat sink.
4. Pull out the heat sink assembly from main P.C.Board.



Mini Suggestion For Inspection With Active Power

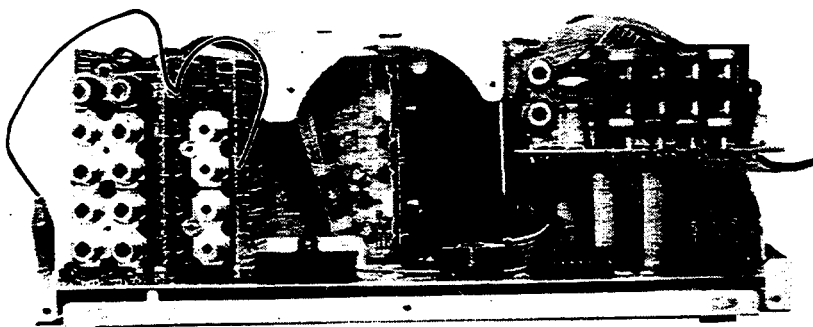
- ① Remove the front panel.
- ② Remove the rear panel.

○ Condition after the above procedure ① through ② is shown in below.



○ For grounding to the chassis:

Connect the grounds of the AUDIO pin jack and the VIDEO pin jack with each other, and ground the both grounds to the bottom chassis since the audio and video systems are grounded from the respective grounds of the pin jacks to the bottom cover through the rear panel.



- When AUDIO output is abnormal with the SOURCE DIRECT set to ON, it is recommended to remove the DAP circuit board temporarily for checkup.
- For checkup of the AUDIO system, it is recommended to remove the VIDEO circuit board temporarily.
However, don't remove the VIDEO circuit board for checkup the Dolby surround effect since the DOLBY IC is installed on the circuit board.

Description of Major LSIs

■ MN171202JPA (IC904) : System Controller

1. Terminal Layout

VDD	1	64	OSC 1
NC	2	63	OSC 2
TA IND	3	62	VSS
TU IND	4	61	X2
CD IND	5	60	X1
PH IND	6	59	ACC
TV IND	7	58	P.OFF
VCR IND	8	57	FL OFF
VID IND	9	56	SEA INH
TV.V IND	10	55	DSP RST
VCR.V IND	11	54	SEA RST
VID.V IND	12	53	S.MUTE
S.DIR IND	13	52	AV VTR IN
NC	14	51	AV VTR OUT
SPO	15	50	AV TV OUT
SDO	16	49	AV TV CONT
BS.REC	17	48	DCS IN
VPP	18	47	NC
STAN IND	19	46	INH
NC	20	45	RM IN
NC	21	44	PROT
NC	22	43	RESET
KO 0	23	42	DATA
KO 1	24	41	H. PHONE
KO 2	25	40	CLK
NC	26	39	STB. O
KI 0	27	38	V. OUT 2
KI 1	28	37	V. OUT 1
KI 2	29	36	S.DCS
KI 3	30	35	V/R-M
PF 0	31	34	SEG 15
PF 1	32	33	SEG 14

2. Key matrix

	KI-0	KI-1	KI-2	KI-3
KO-0	POWER	S.DIRECT	-	-
KO-1	-	TV	VCR/DAT	VIDEO/VDP
KO-2	TUNER	TAPE	CD	PHONO

3. Pin Functions

NO.	symbol	I/O	Functions	NO.	symbol	I/O	Functions
1	VDD	-	Power supply (+ 5V)	33	SEG 14	I	Pull up
2	NC	O		34	SEG 15	I	
3	TAPE IND	O	Indicator control signal output	35	V/R-M	O	REC MUTE signal output
4	TUNER IND	O		36	S.DCS	O	
5	CD IND	O		37	V.OUT 1	O	Video output control
6	PHONO IND	O		38	V.OUT 2	O	
7	TV IND	O		39	STB. O	O	Strobe signal output to IC510
8	VCR IND	O		40	CLK	O	Serial clock output to IC510
9	VIDEO IND	O		41	H.PHONE	O	Head phone control signal output
10	TV.V IND	O		42	DATA	O	Serial data output to IC510
11	VCR.V IND	O		43	RESET	I	Reset signal input
12	VIDEO.V IND	O		44	PROT	I	
13	S.DIR IND	O		45	RM IN	I	Remote control signal input
14	NC	O		46	INH	I	Inhibit signal input
15	SPO	O	Speaker output control	47	NC	I	
16	SDO	O	Control signal output to IC503	48	DCS IN	I	Compu-link signal input
17	BS.REC	O	BS recording control output	49	AV.TV CONT	O	Control the remote signal to TV
18	VPP	-		50	AV.TV OUT	O	AV Compu-link signal output for TV
19	STANDBY IND	O	Indicator control signal output	51	AV.VTR OUT	O	AV Compu-link signal output for VTR
20	NC	O		52	AV.VTR IN	I	AV Compu-link signal input for VTR
21	NC	O		53	S.MUTE	O	Muting signal output
22	NC	O		54	SEA.RST	O	Reset signal output
23	KO 0	O	Key matrix output	55	DSP.RST	O	Reset signal output to IC650
24	KO 1	O		56	SEA INH	O	Inhibit signal output
25	KO 2	O		57	FL OFF	O	FL indication control output
26	NC	O		58	P.OFF	O	Power off signal output
27	KI 0	I	Key matrix input	59	ACC	O	Power supply control output
28	KI 1	I		60	X1	-	Connect to ground
29	KI 2	I		61	X2	-	Non connection
30	KI 3	I		62	VSS	-	Connect to ground
31	PF 0	-	Connect to ground	63	OSC2	O	Output of Xtal oscillation circuit
32	PF 1	-		64	OSC1	I	Input to Xtal oscillation circuit

■ MN171202JPB (IC900) : FL & System controller

1. Terminal Layout

VDD	1	64	OSC 1
S1	2	63	OSC 2
S2	3	62	VSS
S3	4	61	X2
S4	5	60	X1
S5	6	59	D
S6	7	58	C
S7	8	57	B
S8	9	56	A
S9	10	55	KEY IN 3
S10	11	54	KEY IN 2
S11	12	53	KEY IN 1
S12	13	52	KEY IN 0
S13	14	51	CSRP IND
S14	15	50	VOL IND
S15	16	49	VOL DOWN
S16	17	48	VOL UP
-Vdisp	18	47	DCTIN
S17	19	46	TNR
S18	20	45	REMOCONTIN
S19	21	44	F.OFF
S20	22	43	RESET
S21	23	42	SDATA OUT
S22	24	41	SDATA IN
S23	25	40	SCLK OUT
S24	26	39	STB
S25	27	38	CE
S26	28	37	DSP-B
J1	29	36	DSP-R
J2	30	35	CS.I
SH1	31	34	SH4
SH2	32	33	SH3

2. Key matrix

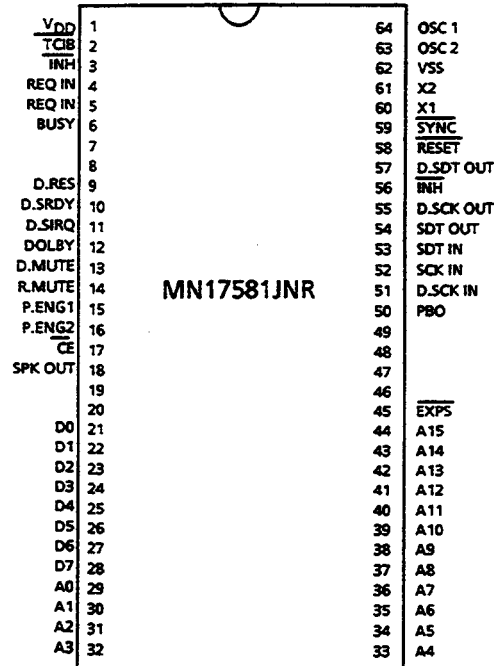
	KI-0	KI-1	KI-2	KI-3
Y0	UP	CSRP	F.SELECT	DISPLAY
Y1	▶	SEA	◀	PRESET
Y2	DEMO	DAP	DOWN	MEMORY

3. Pin Functions

NO.	symbol	I/O	Functions	NO.	symbol	I/O	Functions
1	vdd	-	Power supply (+ 5V)	33	SH3	I	JOE/SHUTTLE signal input
2	S1	O	FL segment control output	34	SH4	I	"
3	S2	O	"	35	CS.I	O	Connect to ground
4	S3	O	"	36	DSP-R	O	DSP-R signal output to IC650
5	S4	O	"	37	DSP-B	O	DSP-B signal output to IC650
6	S5	O	"	38	CE	O	Chip enable signal output to IC906
7	S6	O	"	39	STB	O	Strobe signal output to IC905
8	S7	O	"	40	SCLK OUT	O	Serial clock output to IC605,905,906
9	S8	O	"	41	SDATA IN	O	Serial data input from IC906
10	S9	O	"	42	SDATA OUT	O	Serial data output to IC605,905,906
11	S10	O	"	43	RESET	I	Reset signal input
12	S11	O	"	44	F.OFF	I	Power off signal input from IC904
13	S12	O	"	45	REMOCONTIN	I	Remote control signal input
14	S13	O	"	46	TNR	I	Inhibit signal input
15	S14	O	"	47	DCTIN	I	Compulink signal input
16	S15	O	"	48	VOL UP	I	Volume control signal output
17	S16	O	"	49	VOL DOWN	O	"
18	-Vdisp	-	Power supply for FL display	50	VOL IND	O	Volume indicator control output
19	S17	O	FL segment control output	51	AI IND	O	AI indicator control output
20	S18	O	"	52	KEY IN0	I	Key matrix input
21	S19	O	"	53	KEY IN1	O	"
22	S20	O	"	54	KEY IN2	O	"
23	S21	O	"	55	KEY IN3	O	"
24	S22	O	"	56	A	O	FL grid control output
25	S23	O	"	57	B	O	"
26	S24	O	"	58	C	O	"
27	S25	I	"	59	D	O	"
28	S26	I	"	60	X1	-	Connect to ground
29	J1	I	JOE/SHUTTLE signal input	61	X2	-	Non connection
30	J2	I	"	62	VSS	-	Connect to ground
31	SH1	I	"	63	OSC 2	O	Output of Xtal oscillation circuit
32	SH2	I	"	64	OSC 1	I	Input to Xtal oscillation circuit

■ MN17581JNR (IC650) : DSP Controller

1. Terminal Layout

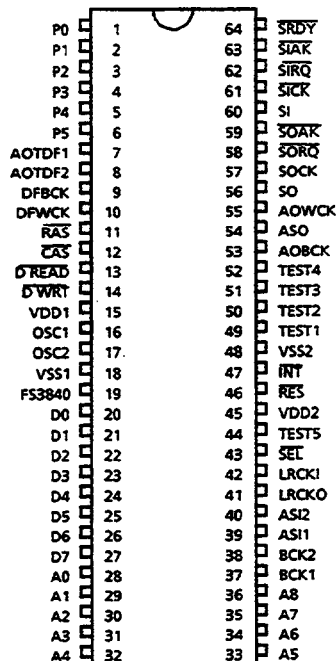


2. Pin Functions

NO.	symbol	I/O	Functions	NO.	symbol	I/O	Functions
1	VDD	-	Power supply (+ 5V)	33	A4	I	P-ROM Add output
2	TCIB	O	Connect to ground	34	A5	I	⋄
3	INH	O	Inhibit signal input	35	A6	O	⋄
4	REQ IN	O	DSP-R signal input from IC900	36	A7	O	⋄
5	REQ IN	O	⋄	37	A8	O	⋄
6	BUSY	O	DSP-B signal output to IC900	38	A9	O	⋄
7		O	Not used	39	A10	O	⋄
8		O	⋄	40	A11	O	⋄
9	D.RES	O	Reset signal output to IC651	41	A12	O	⋄
10	D.SRDY	O	SRDY signal output to IC651	42	A13	O	⋄
11	D.SIRQ	O	SIRQ signal output to IC651	43	A14	I	⋄
12	DOLBY	O	Dolby control signal output	44	A15	I	⋄
13	D.MUTE	O	Mute signal output	45	EXPS	I	Pull up
14	R.MUTE	O	⋄	46		I	Not used
15	P.ENG1	O	Fan control signal output	47		I	⋄
16	P.ENG2	O	⋄	48		I	⋄
17	CE	O	CE signal output to IC659	49		O	⋄
18	SPK OUT	-	Speaker out control signal input	50	PBO	O	Pull up
19		O	Not used	51	D.SCK IN	O	Clock signal input from IC651
20		O	⋄	52	SCK IN	I	Clock signal input from IC900
21	D0	O	P-ROM data input	53	SDT IN	O	Data signal input from IC900
22	D1	O	⋄	54	SDT OUT	O	Data signal output to IC900
23	D2	O	⋄	55	D.SCK OUT	O	Clock signal output to IC651
24	D3	O	⋄	56	INH	O	Inhibit signal input
25	D4	O	⋄	57	D.SDT OUT	O	Serial data output to IC651
26	D5	O	⋄	58	RESET	O	Reset signal input from IC904
27	D6	I	⋄	59	SYNC	O	Not used
28	D7	I	⋄	60	X2	-	⋄
29	A0	I	P-ROM Add output	61	X1	-	⋄
30	A1	I	⋄	62	VSS	-	Connect to ground
31	A2	-	⋄	63	OSC2	O	Output of Xtal oscillation circuit
32	A3	-	⋄	64	OSC1	I	Input to Xtal oscillation circuit

■ LC8301A (IC651) : DSP (Digital Signal Processor)

1. Terminal layout

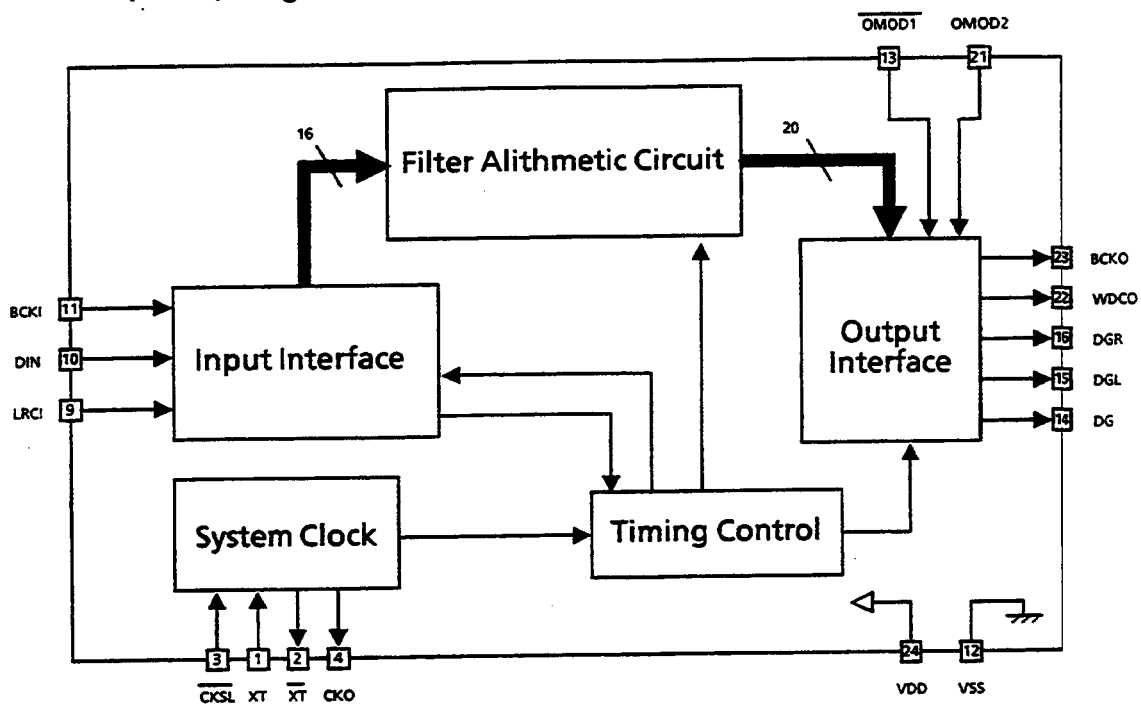


2. Pin functions

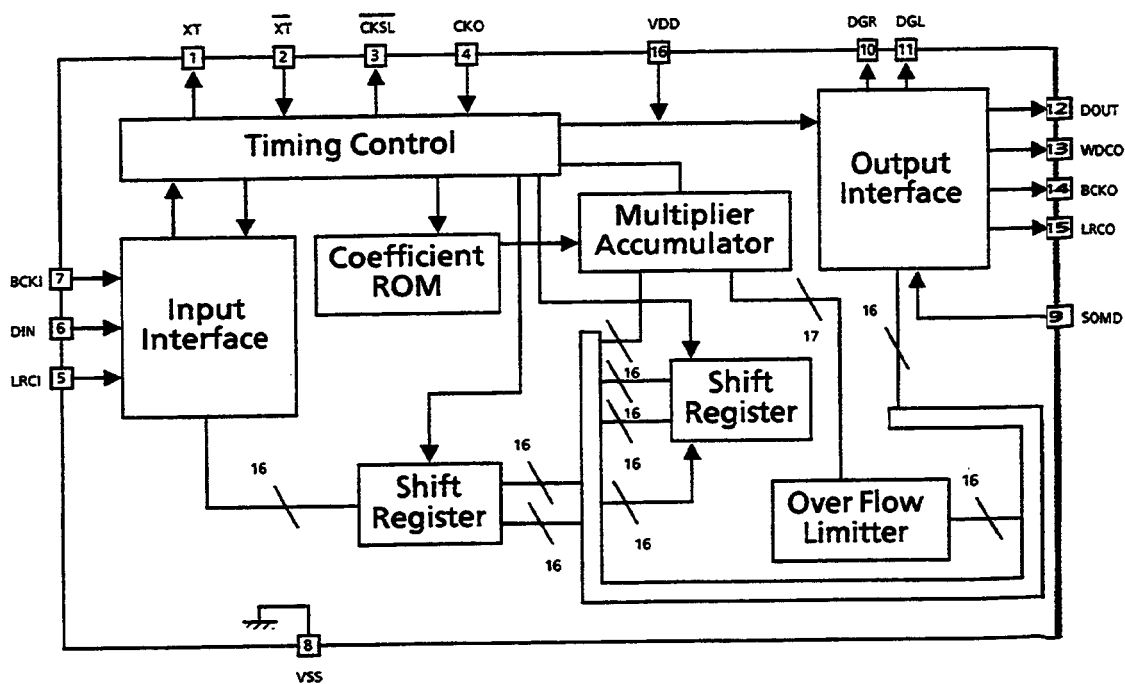
Pin No.	Symbol	I/O	Functions
1~6	P0~P5	I/O	Not used
7,8	AOTDF1 / AOTDF2	O	Audio serial data output.
9	DFBCK	O	Bit clock for AOTDF1 / AOTDF2 output.
10	DFWCK	O	Not used
11	RAS	O	ROW ADDRESS STROBE : Signal output when accessing external D-RAM.
12	CAS	O	COLUMN ADDRESS STROBE : Signal output when accessing external D-RAM.
13	DREAD	O	Data read signal output when accessing external D-RAM.
14	DWRT	O	Data write signal output when accessing external D-RAM.
15,45	VDD	—	Power supply (+ 5V)
16	OSC1	I	External clock input. (384fs)
17	OSC2	O	Not used
18,48	VSS	—	Ground
19	FS3840	O	384fs output
20~27	D0~D7	I/O	Data input / output between external D-RAM and these pins.
28~36	A0~A8	O	Address output for external D-RAM.
37	BCK1	I	Bit clock for ASI 1 input.
38	BCK2	I/O	Bit clock for ASI 2 input.
39	ASI 1	I	Audio data serial input
40	ASI 2	I	Audio data serial input
41	LRCKO	O	L/R channel selectable signal output.(L:R-ch , H:L-ch)
42	LRCKI	I	L/R channel selectable signal input.(L:R-ch , H:L-ch)
43	SEL	I	Oscillator selectable signal input. (L:external , H:internal)
44	TEST 5	O	Output for TEST.
46	RES	I	Reset input
47	INT	I	Interrupt request signal input.
49~52	TEST1~TEST4	I	Input for test. Connect to ground.
53	AOBCK	O	Bit clock for ASO output
54	ASO	O	Audio data serial output
55	AOWCK	O	Not used
56	SO	O	Not used
57	SOCK	I	Not used
58	SORQ	I	Request signal input for serial output
59	SOAK	O	Not used
60	SI	I	Serial data input from control micro computer.
61	SICK	I	Serial clock input for SI input.
62	SIRO	I	Request signal input for serial input.
63	SIAR	O	Signal output which indicates that the serial input is on the execution.
64	SRDY	I	Ready signal input which indicates that the serial data input from control micro computer is an end.

Internal Block Diagram of Other ICs

■ SM5818AS (IC655) : Digital Filter

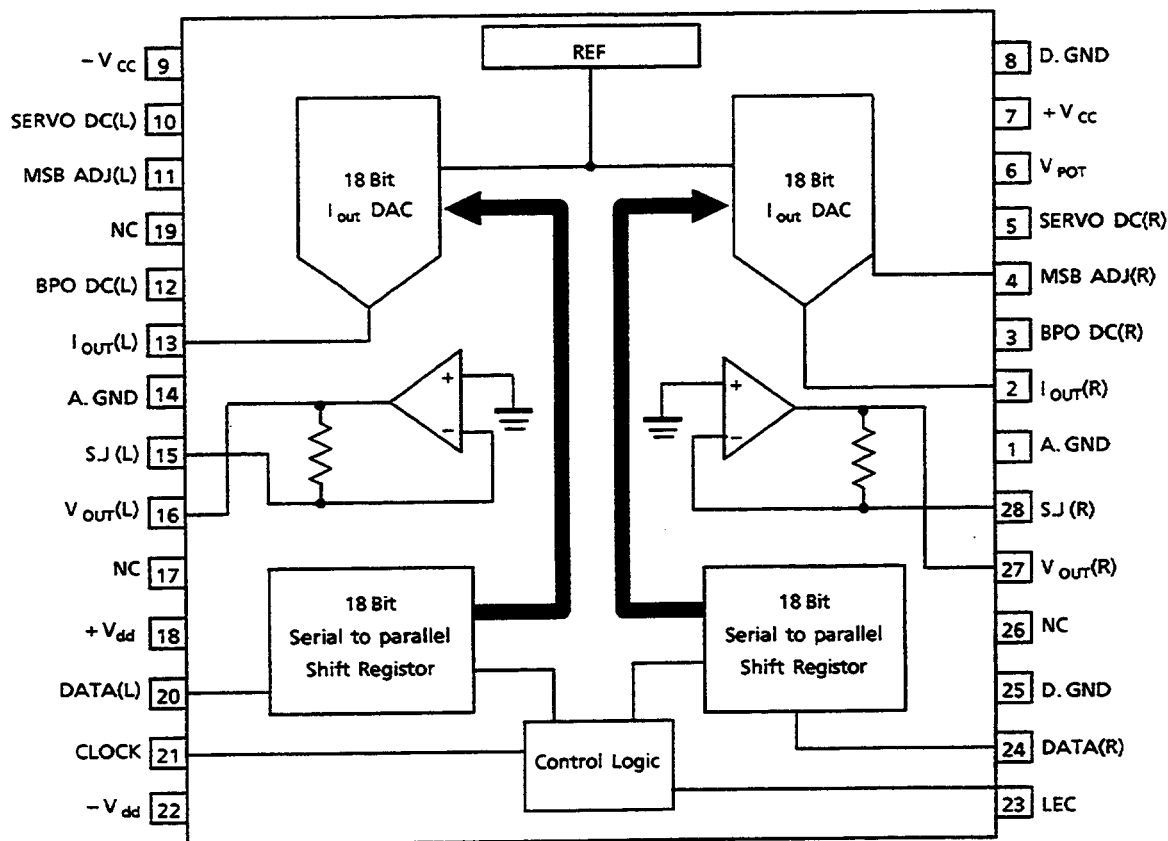


■ SM5807FS (IC656) : Digital Filter



■ PCM1700U (IC657): Digital to Analog Converter

1 . Block Diagram



2 . Pin Functions

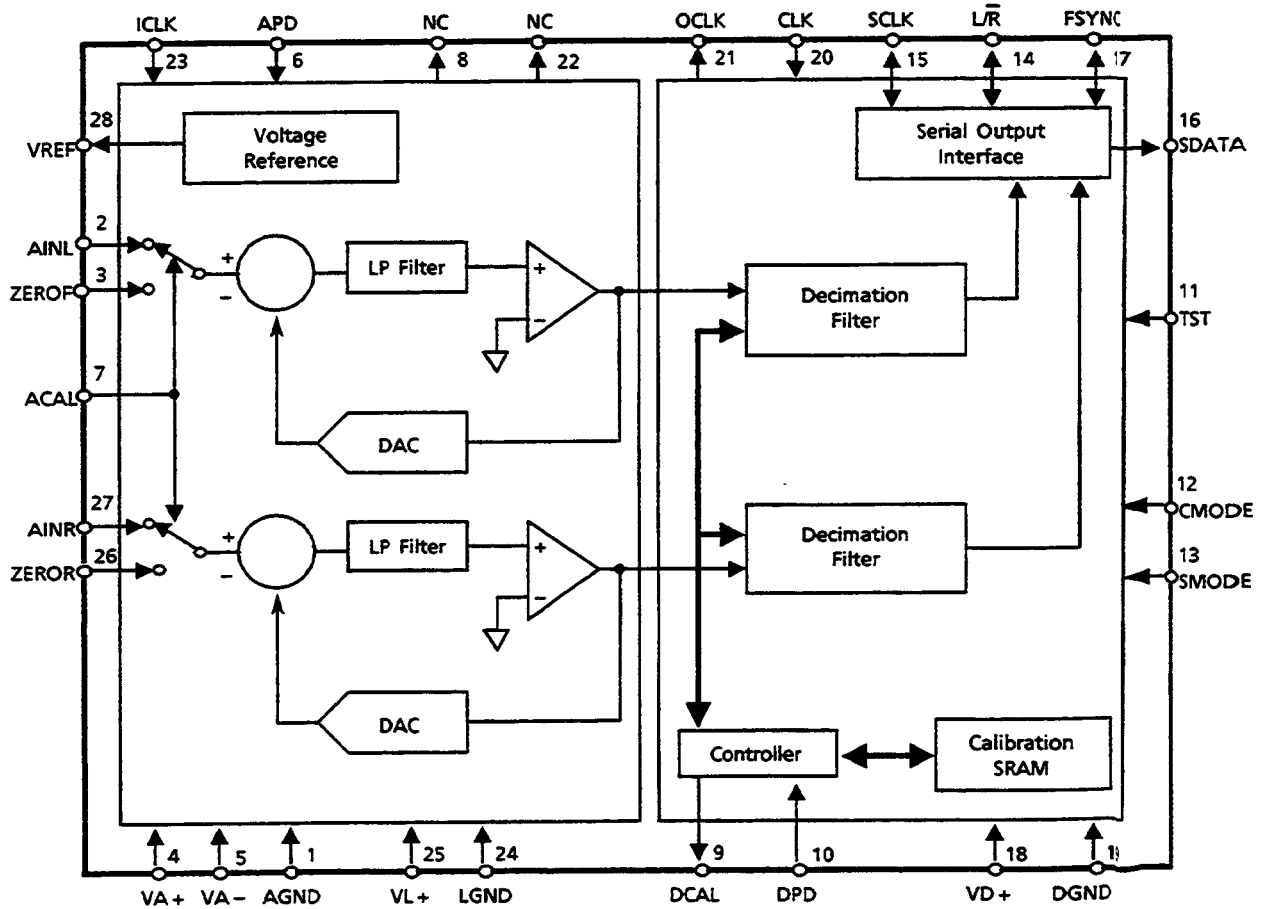
Pin No.	Symbol	Functions	Pin No.	Symbol	Functions
1	A. GND	Analog ground	15	S. J(L)	Feedback terminal (L ch)
2	I _{OUT} (R)	Current output (R ch)	16	V _{OUT} (L)	Voltage output (L ch)
3	BPO DC(R)	Offset filter (R ch)	17	NC	Non connection
4	MSB ADJ(R)	MSB adjustment (R ch)	18	+ V _{dd}	Power supply for digital circuit
5	SERVO DC(R)	Servo filter (R ch)	19	NC	Non connection
6	V _{POT}	Reference voltage output for MSB adjustment.	20	DATA(L)	Data input (L ch)
7	+ V _{CC}	Power supply for analog circuit	21	CLOCK	Clock input
8	D. GND	Digital ground	22	- V _{dd}	Power supply for digital circuit
9	- V _{CC}	Power supply for analog circuit	23	LEC	Latch enable control input
10	SERVO DC(L)	Servo filter (L ch)	24	DATA(R)	Data input (R ch)
11	MSB ADJ(L)	MSB adjustment (L ch)	25	D. GND	Digital ground
12	BPO DC(L)	Offset filter (L ch)	26	NC	Non connection
13	I _{OUT} (L)	Current output (L ch)	27	V _{OUT} (R)	Voltage output (R ch)
14	A. GND	Analog ground	28	S. J (R)	Feedback terminal (R ch)

■ CS5339-KP (IC654) : Analog to Digital Converter

1. Terminal layout

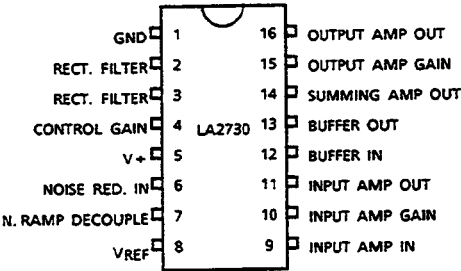
AGND	1	28	VREF
AINL	2	27	AINR
ZEROL	3	26	ZEROR
VA +	4	25	VL +
VA -	5	24	LGND
APD	6	23	ICKL
ACAL	7	22	NC(OPEN)
NC(OPEN)	8	21	OCLK
DCAL	9	20	CLK
DPD	10	19	DGND
TST	11	18	VD +
CMODE	12	17	FSYNC
SMODE	13	16	SDATA
L/R	14	15	SCLK

2. Block diagram

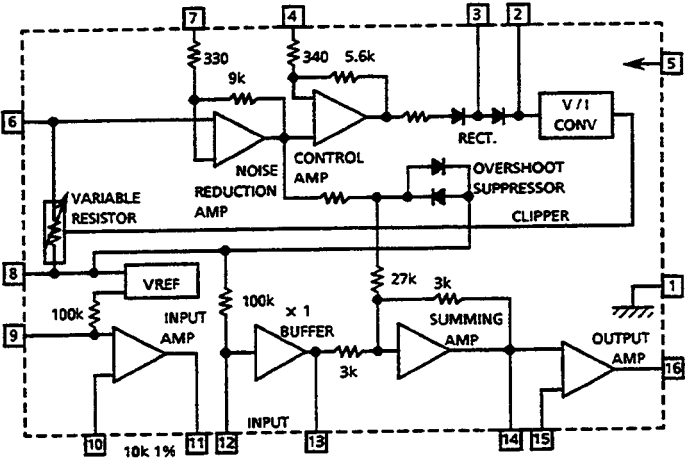


■ LA2730 (IC505) : Dolby B type Noise Reduction

1. Terminal Layout

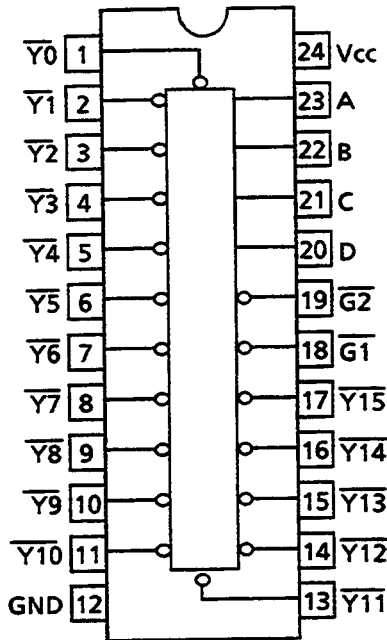


2. Block Diagram



■ TC74HC154AP (IC901) : Decoder

1. Terminal layout & Block diagram



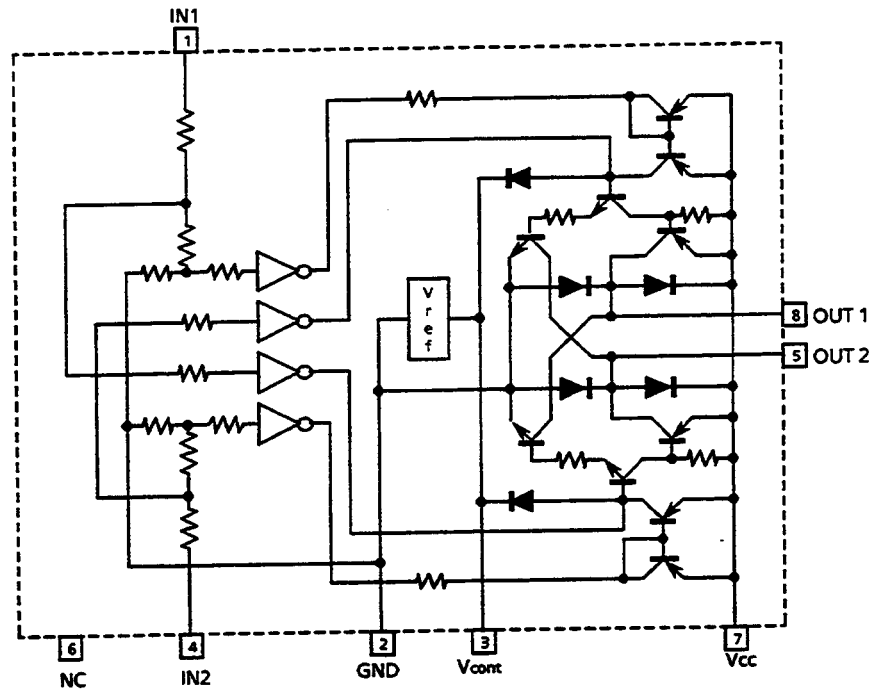
2. Functions table

Input						Selected Output
G1	G2	D	C	B	A	
L	L	L	L	L	L	Y0
L	L	L	L	L	H	Y1
L	L	L	L	H	L	Y2
L	L	L	L	H	H	Y3
L	L	L	H	L	L	Y4
L	L	L	H	L	H	Y5
L	L	L	H	H	L	Y6
L	L	L	H	H	H	Y7
L	L	H	L	L	L	Y8
L	L	H	L	L	H	Y9
L	L	H	L	H	L	Y10
L	L	H	L	H	H	Y11
L	L	H	H	L	L	Y12
L	L	H	H	L	H	Y13
L	L	H	H	H	L	Y14
L	L	H	H	H	H	Y15
x	H	x	x	x	x	NONE
H	x	x	x	x	x	NONE

x : Don't care

■ LB1639-CV (IC514) : Motor Driver

1. Block Diagram

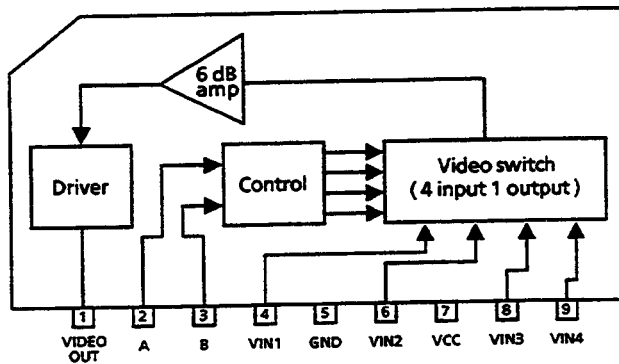


2. Functions table

IN 1	IN 2	OUT 1	OUT 2	MOTOR
H	L	H	L	CLOCKWISE
L	H	L	H	COUNTER-CLOCKWISE
H	H	OFF	OFF	WAITING
L	L	OFF	OFF	WAITING

■ LA7952 (IC600) : Video Switch with 6 dB amp.

1. Terminal Layout & Block Diagram

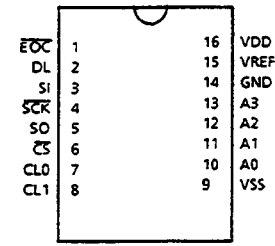


2. Pin functions

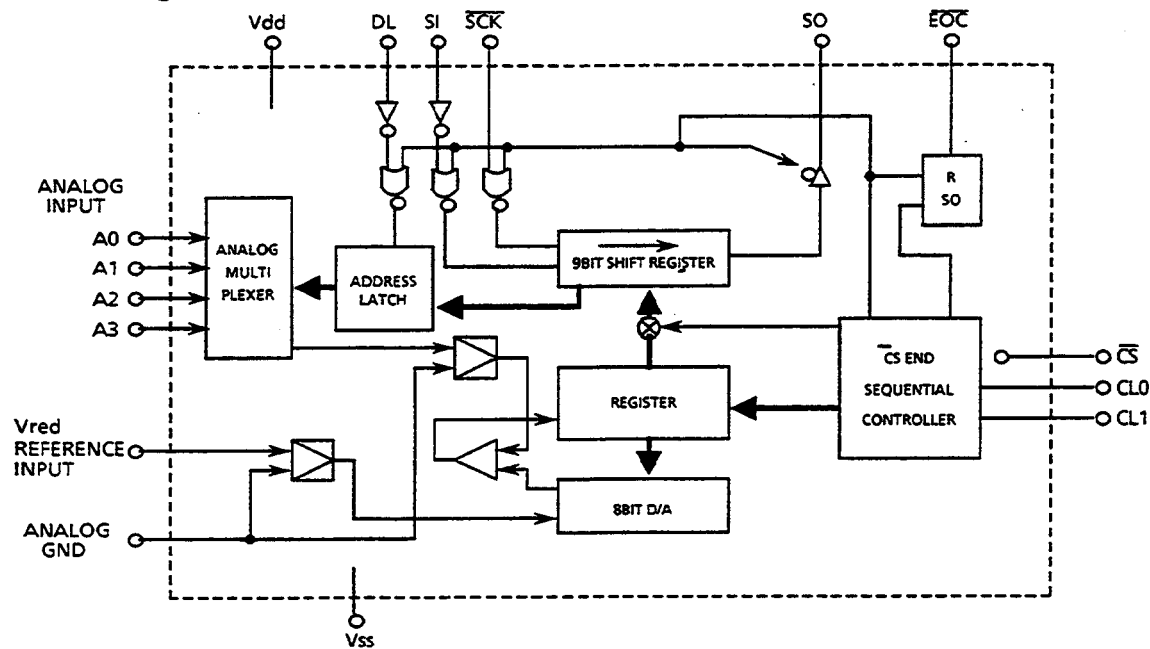
S2 (2 pin)	S3 (3 pin)	VIN1 (4 pin)	VIN2 (6 pin)	VIN3 (8 pin)	VIN4 (9 pin)
H	H	ON	OFF	OFF	OFF
L	H	OFF	ON	OFF	ON
H	L	OFF	OFF	ON	OFF
L	L	OFF	OFF	OFF	ON

■ μ PD7001C (IC906) : Analog to Digital Converter

1. Terminal Layout

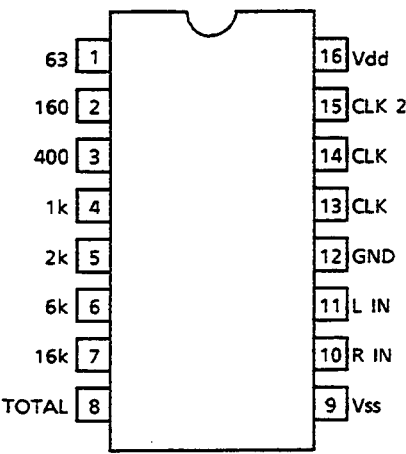


2. Block Diagram



■ XR1091DCP (IC907) : Display Filter

1. Terminal Layout



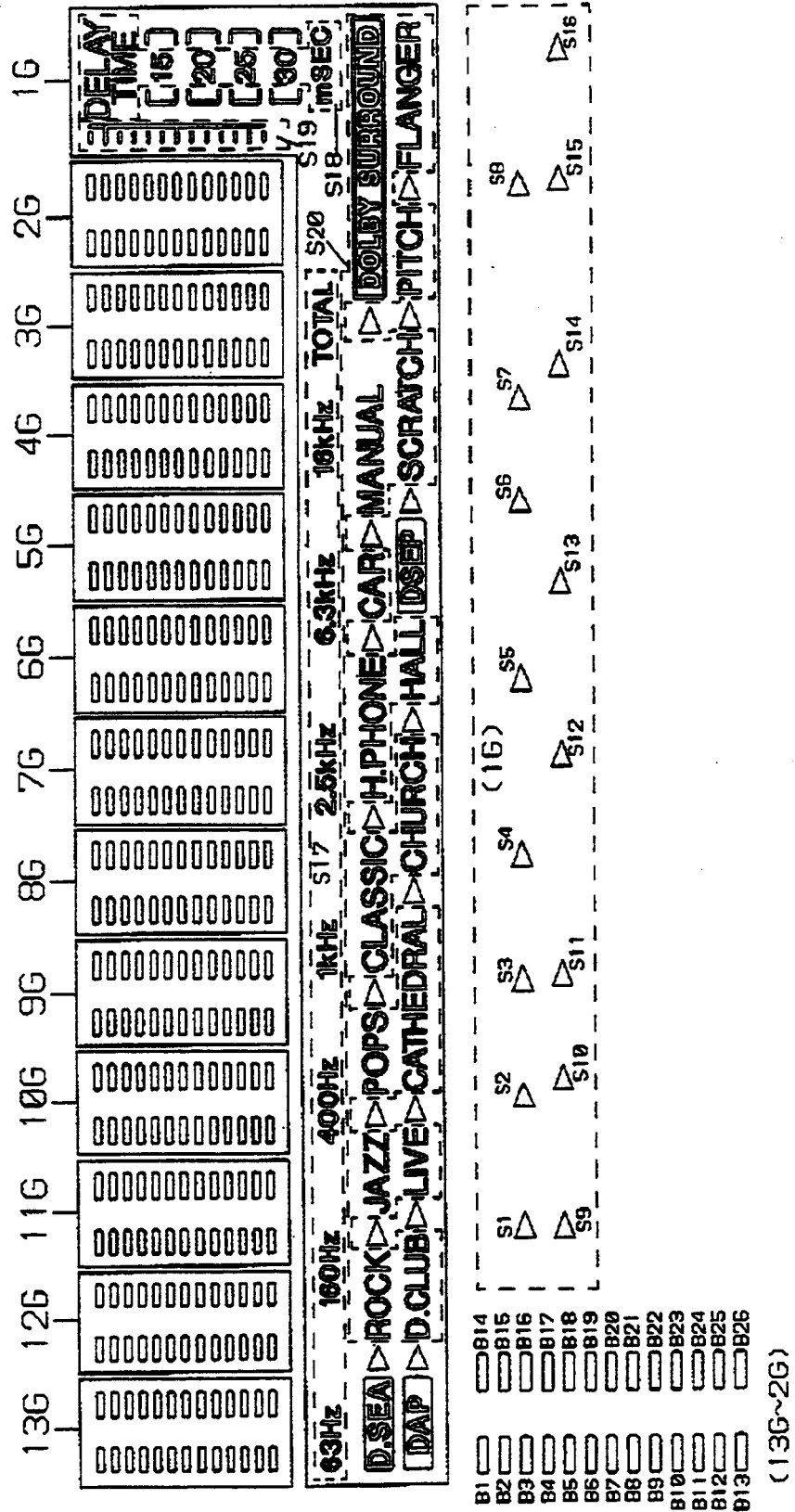
2. Pin functions

Pin No.	Symbol	Descriptions
1	63	Peak hold output of 63Hz band-pass filter
2	160	Peak hold output of 160Hz band-pass filter
3	400	Peak hold output of 400Hz band-pass filter
4	1k	Peak hold output of 1kHz band-pass filter
5	2k	Peak hold output of 2kHz band-pass filter
6	6k	Peak hold output of 6kHz band-pass filter
7	16k	Peak hold output of 16Hz band-pass filter
8	TOTAL	Total frequency output (peak hold)
9	Vss	Power supply (-6V)
10	R IN	Right channel input
11	L IN	Left channel input : Connecting to ground
12	GND	Ground terminal
13	CLK	Connecting capacitor for clock
14	CLK	Connecting resistor to pin 13 for clock
15	CLK / 2	1/2 clock output
16	Vdd	Power supply (+ 6V)

Internal wiring of the FL Display

■ FL901 : ELU0001-123

1. Grid Layout



2. Pin Connections

[illegible]

3. Grid-Anode Connections

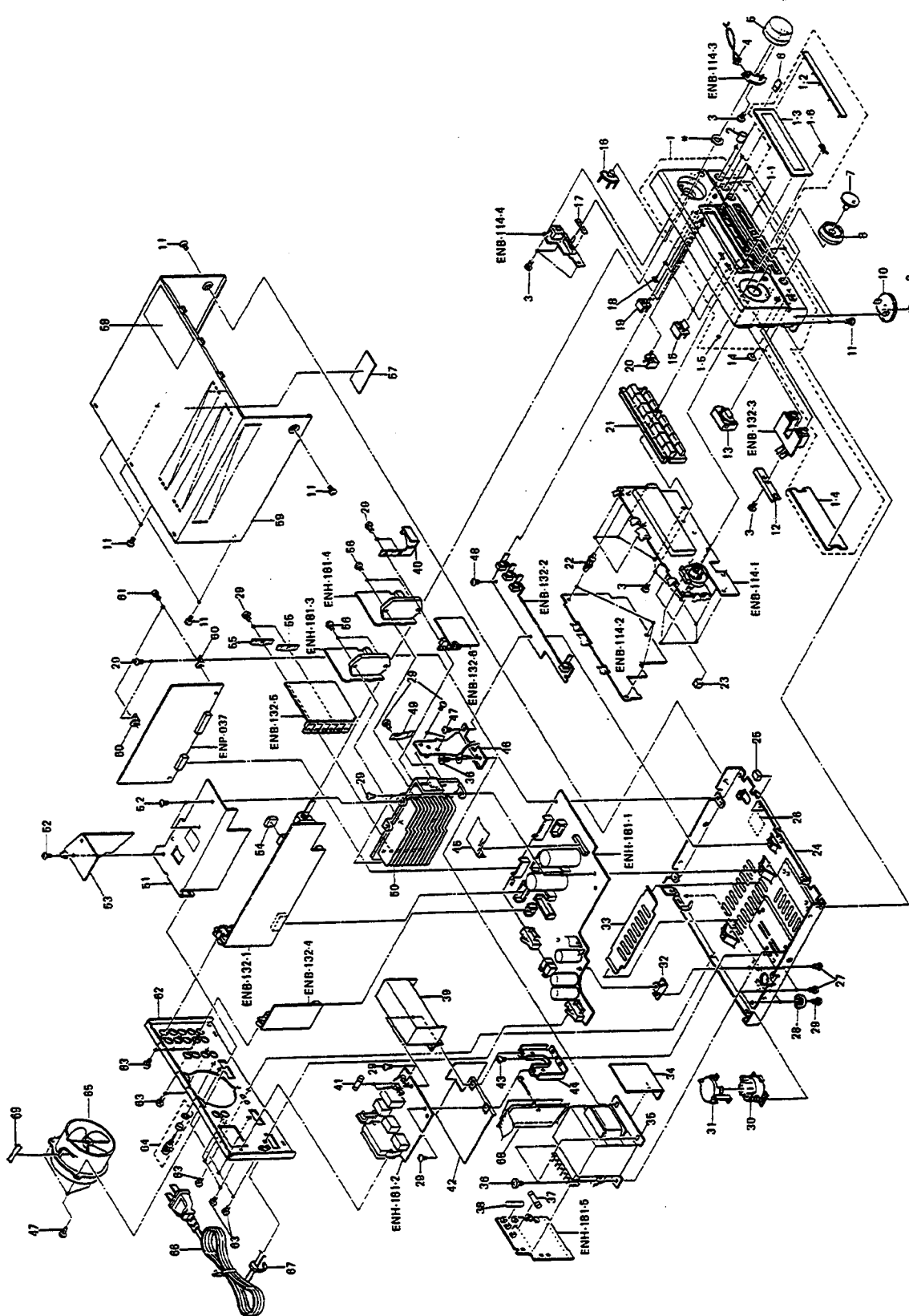
[illegible]

The diagram illustrates the internal architecture of a Hi-Fi system, showing the flow of audio signals and control logic. The system is composed of several main functional blocks:

- Input Section:** Includes a MIC (IC609) and a MIC MIX (IC511) for microphone input. The main input section features a switch (IC510, TC916AN) that selects between PHONO, TV, VIDEO/DP, VCR PLAY, and VCR REC inputs. These signals are processed by IC512 and IC660.
- Processing Section:** The core of the system is the DSP (IC651, LC83010N) which handles digital signal processing. It is supported by an A/D converter (IC654, CS5339-KP), a digital filter (IC656, SM5807FS), and a D/A converter (IC657, PCM1700U). The system also includes a digital filter (IC655, SM5807AS) and a motor (IC503, LC4966) for tape or disc control.
- Control Section:** The system is controlled by a SYSTEM CONTROLLER (IC904, MN17202JPA) which manages the overall operation. It is interfaced with a KEY MATRIX and a JOG DIAL (JS900). The controller also manages the FL & SYSTEM CONTROLLER (IC900, MN17202JPB) and the GRID CONTROL (IC902, 903, MSLS15ARS).
- Output Section:** The processed signals are sent to the FRONT SPEAKERS (HIGH and LOW) and REAR SPEAKERS. The system also includes a HEADPHONE output and a REAR LEVEL control (IC501, IC502).
- Power and Tuning Section:** The system includes a TUNER (JA002, FX-MX90BK) and a CD player (JA003, XL-MX90BK). The power section includes a P.OFF (P.OFF) and a DCS (DCS) control line.

The diagram is labeled with component names and values, and includes a legend for the FL900 and ELU0001-123.

General Exploded View and Parts List



***mark Indicates attached part.**

PARTS LIST

Contents

General Exploded View and Parts List	2-2
Printed Circuit Board Ass'y and Parts List	2-5
■ ENH-181 □ Front Amplifier & Power Primary PC Board Ass'y	2-5
■ ENB-132 □ Rear Amplifier & Source Select PC Board Ass'y	2-9
■ ENP-037 □ DAP PC Board Ass'y	2-12
■ ENB-114 □ System & FL Control PC Board Ass'y	2-14

■ Parts List

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-AXMX90BKE(S	Front Panel Ass'y	1		
	1-1	E102337-004	Front Panel	1		
	1-2	E306922-004	Fitting	1		
	1-3	E306980-002	Window Screen	1		
	1-4	E406633-001	FL Screen	1		
	1-5	E60912-003	Speed Nut	1		
	1-6	PQ42561	JVC Mark	1		
	2	E306921-001	Knob	4	MIXING	
	3	SDSF2608Z	Screw	15		
	4	EWS142-024	Socket Wire Ass'y	1		
	5	E306979-001	Volume Knob	1		
	6	E406160-001	Slide Knob	1	BALANCE	
	7	E306982-002	Jog Knob	1		
	8	E306983-001	Shuttle Knob	1		
	9	E75896-001	Spacer	2	for Foot (Front)	
	10	E306935-001	Foot	2	Front	
	11	SDSG3008M	Screw	11		
	12	E406159-001	Bracket	1		
	13	E306914-002	Push Button Ass'y	1	POWER	
	14	E406089-001	Indicator	1	STANDBY	
	15	E306916-002	Push Button	3	DAP	
	16	E406158-002	Remote Lens	1		
	17	E406337-001	Felt Spacer	1		
	18	E406091-001	Indicator	2		
	19	E306917-001	Push Button	1	AI	
	20	E306917-002	Push Button	1	DEMO	
	21	E206881-001	Push Button Ass'y	1	SOURCE	
	22	E307112-001	Fastener	3		
	23	E306805-032	Spacer	1		
	24	E102324-005	Chassis Base	1		Except U
	25	E102324-006	Chassis Base	1		U
	26	E306805-033	Spacer	1		
	27	E74925-001	Dolby Sheet	1		
		SBSG3008N	Screw	1		Except U
		SBSG3008N	Screw	3		U
⚠	28	E47227-029	Foot	2	Rear	
	29	SBSG3010CC	Screw	16		
	30	QSR0085-018	Voltage Selector	1		U
	—	E406658-002	Label	1	for Voltage Selector	U
	31	E302764-002	Voltage Selector Cover	1		U
⚠	32	E68587-004	Circuit Board Bracket	1		
⚠	33	E406638-001	Protect Sheet	1		
⚠	34	E486377-002	Shield Cover	1		
⚠	35	ETP1150-42JA	Power Transformer	1		J, C
		ETP1150-42FA	Power Transformer	1		U
⚠		ETP1150-42EA	Power Transformer	1		Except J, C, U, BS
⚠		ETP1150-42EABS	Power Transformer	1		BS
⚠	36	E65389-004	Special Screw	4		
⚠	37	QMF51U1-4R0S	Fuse	1	F001	J, C
		QMF51A2-2R5S	Fuse	1	F001	U
⚠		QMF51A2-1R25S	Fuse	1	F001	Except J, C, U, BS
⚠		QMF51E2-1R25SBS	Fuse	1	F001	BS
⚠	38	QMF51A2-1R25S	Fuse	1	F002	U
	39	E307662-002	Primary Cover	1		
	40	E406712-001	Leaf Bracket	1		
⚠	41	QMF51U1-2R5S	Fuse	2	F101, F102	J, C
⚠		QMF51A2-2R0S	Fuse	2	F101, F102	Except J, C, BS
⚠		QMF51E2-2R0SBS	Fuse	2	F101, F102	BS
	42	E307661-002	Protect Sheet	1		
	43	SBST3006CC	Screw	1		

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	44	E307558-001	Circuit Board Bracket	1	FC900	
	45	EWR1XE-14TT	Flat Cable	1		
	46	E406636-002	Heat Sink Bracket	1		
	47	SBSG3008M	Screw	4		
	48	E49447-003	Shaft	1		
	49	E406271-001	Spring	1		
	50	E307563-002	Heat Sink	1		
	51	E307576-001	Heat Sink	1		
	52	SDSG3010M	Screw	3		
	53	E307663-002	Sheet	1		
	54	E306805-034	Spacer	1		
	55	E406092-001	Leaf Spring	2		
	56	SBSG3014CC	Screw	4		
	57	E306805-024	Spacer	1		
	58	E67000-017	Caution Label	1		
	59	E206809-007	Metal Cover	1		
	60	E406346-001	Bracket	2		
	61	E48729-008	Plastic Rivet	2		
	62	E206841-004	Rear Panel	1		J
		E206841-005	Rear Panel	1		C
		E206841-006	Rear Panel	1		U A E, EF, G, GI BS
		E206841-007	Rear Panel	1		
		E206841-008	Rear Panel	1		
		E206841-009	Rear Panel	1		
	63	E73273-003	Special Screw	12		
	64	E70078-003	GND Terminal	1		J, C A E, EF, G, GI
⚠	65	E206880-001	Fan Ass'y	1		
⚠	66	QMP1D00-200H	Power Cord	1		
⚠		QMP2560-244	Power Cord	1		
⚠		QMP3900-200	Power Cord	1		
⚠		QMP7520-200	Power Cord	1		U BS Excpet BS BS
⚠		QMP9017-008BS	Power Cord	1		
⚠	67	QHS3876-162	Cord Stopper	1		
⚠		QHS3876-162BS	Cord Stopper	1		
	68	E406689-002	Sheet	1		
	69	EXO030006H10S11	Spacer	1		J Excpet J J C
	—	E307570-001	Number Label	1		
		E61029-009	Number Label	1		
	—	E75803-001	Fuse Caution Label	1		
		E75804-001	Fuse Caution Label	1		
	—	QZL1001-001	UL Label	1		J C E G
	—	E45858-002	CSA Label	1		
	—	E70028-001	Approval Label	1		
	—	E74792-107	FTZ Label	1		

The Marks for Designated Areas

J ————— the U.S.A.
 C ————— Canada
 A ————— Australia
 E, EF ——— Continental Europe
 G ————— Germany
 BS ————— the U.K.
 GI ————— Italy
 U ————— Universal Type
 No mark indicates all areas.

⚠ Safety Parts

Note (1)

PC Board Ass'y	Designated Areas
ENH-181 A	the U.S.A.
ENH-181 B	Canada
ENH-181 C	Universal Type
ENH-181 D	Continental Europe
ENH-181 E	Australia
ENH-181 F BS	the U.K.
ENH-181 G	Germany, Italy

Transistors

ITEM	PART NUMBER	DESCRIPTION	AREA
Q001	2SC1685(Q,R)	SILICON MATSUSHITA	
Q004	2SC1685(Q,R)	SILICON MATSUSHITA	
Q006	2SB1357(E,F)	SILICON ROHM	
Q008	DTA114YS	SILICON ROHM	
Q009	DTA144ES	SILICON ROHM	
Q011	2SD1302(S,T)	SILICON MATSUSHITA	
Q012	2SD1302(S,T)	SILICON MATSUSHITA	
Q013	DTA114YS	SILICON ROHM	
Q014	DTA144ES	SILICON ROHM	
Q500	2SC1685(Q,R)	SILICON MATSUSHITA	
Q501	2SC1685(Q,R)	SILICON MATSUSHITA	
Q502	2SA733A(P,Q)	SILICON NEC	
Q503	2SC1740(R,S)	SILICON ROHM	
Q504	2SC1740S(R,S)	SILICON ROHM	
Q505	2SC1740S(R,S)	SILICON ROHM	
Q506	2SC1685(Q,R)	SILICON MATSUSHITA	
Q507	2SC1685(Q,R)	SILICON MATSUSHITA	
Q522	DTA144ES	SILICON ROHM	
Q523	DTA144ES	SILICON ROHM	
Q524	DTA144ES	SILICON ROHM	
Q525	DTA144ES	SILICON ROHM	
Q526	DTA144ES	SILICON ROHM	
Q527	DTA144ES	SILICON ROHM	
Q528	2SD2144S(VW)	SILICON ROHM	
Q529	2SD2144S(VW)	SILICON ROHM	
Q530	2SD2144S(VW)	SILICON ROHM	
Q531	2SD2144S(VW)	SILICON ROHM	
Q532	DTA144ES	SILICON ROHM	
Q533	DTA144ES	SILICON ROHM	
Q534	2SD2144S(VW)	SILICON ROHM	

△ : SAFETY PARTS

I.C.s.

ITEM	PART NUMBER	DESCRIPTION	AREA
IC500	STK4141MK5	I.C. SANYO	
IC503	LC4966	I.C. SANYO	
IC504	LC4966	I.C. SANYO	
IC506	BA15218N	I.C. ROHM	
IC507	VC4580L	I.C. DAINICHI	
IC570	STK4141MK5	I.C. SANYO	

△ : SAFETY PARTS

Diodes

ITEM	PART NUMBER	DESCRIPTION	AREA
D003	1SS133	SILICON ROHM	
D005	1SR139-200	SILICON ROHM	
D009	MTZ6.8JC	ZENER ROHM	
D010	1SR139-200	SILICON ROHM	
D011	1SR139-200	SILICON ROHM	
D012	MTZ30JC	ZENER ROHM	
D016	1SR139-200	SILICON ROHM	
D017	1SR139-200	SILICON ROHM	
D018	1SR139-200	SILICON ROHM	
D019	1SR139-200	SILICON ROHM	
D020	1SR139-200	SILICON ROHM	
D021	1SR139-200	SILICON ROHM	
D022	30DL2FC	SILICON NIMONINTER	
D023	30DL2FC	SILICON NIMONINTER	
D024	30DL2FC	SILICON NIMONINTER	
D025	30DL2FC	SILICON NIMONINTER	
D028	1SR139-200	SILICON ROHM	
D031	1SS133	SILICON ROHM	
D039	MTZ6.8JC	ZENER ROHM	
D501	1SS133	SILICON ROHM	

△ : SAFETY PARTS

Diodes

ITEM	PART NUMBER	DESCRIPTION	AREA
D502	1SS133	SILICON ROHM	
D503	1SS133	SILICON ROHM	
D504	1SS133	SILICON ROHM	
D505	1SS133	SILICON ROHM	
D506	1SS133	SILICON ROHM	
D508	1SS133	SILICON ROHM	
D509	MTZ9.1JC	ZENER ROHM	
D510	1SS133	SILICON ROHM	
D511	1SR139-200	SILICON ROHM	
D512	1SR139-200	SILICON ROHM	
D521	1SS133	SILICON ROHM	
D522	1SS133	SILICON ROHM	
D523	1SS133	SILICON ROHM	
D524	1SS133	SILICON ROHM	
D525	MTZ7.5JC	ZENER ROHM	
D527	1SS133	SILICON ROHM	
D571	1SS133	SILICON ROHM	
D572	1SS133	SILICON ROHM	
D573	MTZ15JC	ZENER ROHM	
D574	MTZ15JC	ZENER ROHM	
D575	MTZ9.1JC	ZENER ROHM	
D575	MTZ9.1JC	ZENER ROHM	
D575	MTZ9.1JC	ZENER ROHM	
D575	MTZ9.1JC	ZENER ROHM	
D575	MTZ9.1JC	ZENER ROHM	
D575	MTZ9.1JC	ZENER ROHM	
D580	1SS133	SILICON ROHM	
D581	1SS133	SILICON ROHM	
D582	1SS133	SILICON ROHM	
D583	1SS133	SILICON ROHM	
D584	1SS133	SILICON ROHM	
D585	1SS133	SILICON ROHM	

△ : SAFETY PARTS

Capacitors

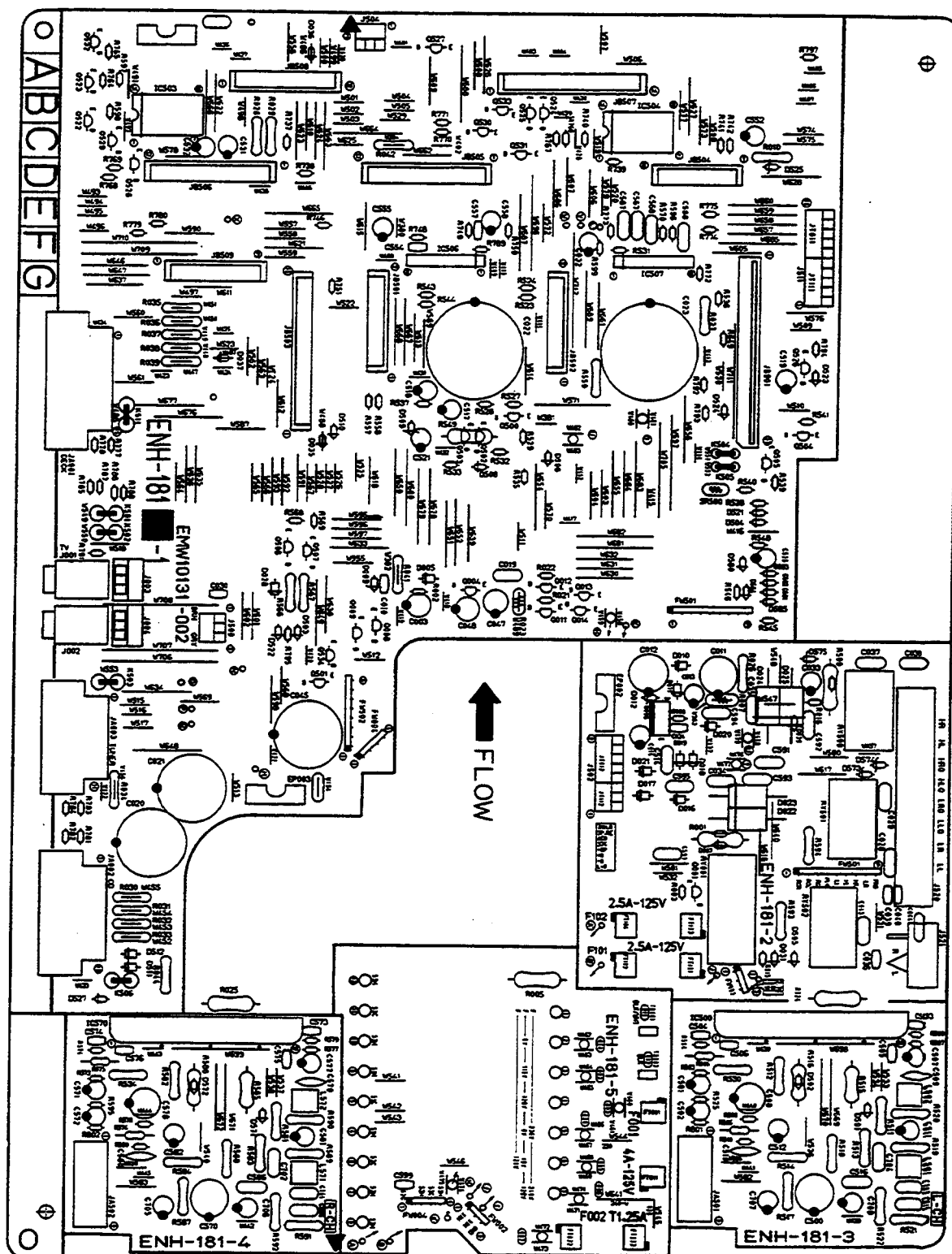
ITEM	PART NUMBER	DESCRIPTION	AREA
C003	QEK51HM-106	10MF 50V ELECTRO	
C010	QCV81CM-103	0.01MF 16V CERAMIC	
C011	QETB1HM-227	220MF 50V ELECTRO	
C012	QETB1JM-227	220MF 63V ELECTRO	
C013	QETB1HM-226	22MF 50V ELECTRO	
C014	QETB1HM-226	22MF 50V ELECTRO	
C019	QFN81HK-104	0.1MF 50V MYLAR	
C020	QETB1VM-338	3300MF 35V ELECTRO	
C021	QETB1VM-338	3300MF 35V ELECTRO	
C022	EEW4205-688T	6800MF ELECTRO	
C023	EEW4205-688T	6800MF ELECTRO	
C024	QCV81CM-103	0.01MF 16V CERAMIC	
C028	QFN81HK-102	1000PF 50V MYLAR	
C028	QFN81HK-102	1000PF 50V MYLAR	
C028	QFN81HK-102	1000PF 50V MYLAR	
C029	QFN81HK-102	1000PF 50V MYLAR	
C029	QFN81HK-102	1000PF 50V MYLAR	
C030	QCV81CM-103	0.01MF 16V CERAMIC	
C032	QETB1HM-475	4.7MF 50V ELECTRO	
C033	QETB1EM-476	47MF 25V ELECTRO	
C036	QCHB1EZ-223	0.022MF 25V CERAMIC	
C036	QCHB1EZ-223	0.022MF 25V CERAMIC	
C036	QCHB1EZ-223	0.022MF 25V CERAMIC	
C037	QFN81HK-102	1000PF 50V MYLAR	
C037	QFN81HK-102	1000PF 50V MYLAR	
C038	QFN81HK-102	1000PF 50V MYLAR	
C038	QFN81HK-102	1000PF 50V MYLAR	
C038	QFN81HK-102	1000PF 50V MYLAR	
C039	QCHB1EZ-223	0.022MF 25V CERAMIC	
C039	QCHB1EZ-223	0.022MF 25V CERAMIC	
C039	QCHB1EZ-223	0.022MF 25V CERAMIC	
C040	QCHB1EZ-223	0.022MF 25V CERAMIC	
C040	QCHB1EZ-223	0.022MF 25V CERAMIC	
C043	QFN81HK-102	1000PF 50V MYLAR	
C043	QFN81HK-102	1000PF 50V MYLAR	
C043	QFN81HK-102	1000PF 50V MYLAR	
C044	QFN81HK-102	1000PF 50V MYLAR	
C044	QFN81HK-102	1000PF 50V MYLAR	
C044	QFN81HK-102	1000PF 50V MYLAR	
C047	QEK51HM-106	10MF 50V ELECTRO	
C048	QEK51HM-106	10MF 50V ELECTRO	
C500	QETB2AM-476	47MF 100V ELECTRO	
C501	EEZ5009-106	10MF ELECTRO	
C502	EEZ5009-106	10MF ELECTRO	
C503	QCB81HK-101	100PF 50V CERAMIC	
C504	QCB81HK-101	100PF 50V CERAMIC	

△ : SAFETY PARTS

Printed Circuit Board Ass'y and Parts List

■ENH-181□ Front Amplifier & Power Primary PC Board Ass'y

Note : ENH-181 ☐ varies according to the areas employed. See note (1) when placing an order.



Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
Δ	R566	QRD14CJ-100S	10 1/4W UNF. CARBON	
Δ	R567	QRD14CJ-560S	56 1/4W UNF. CARBON	
	R568	QRD167J-152	1.5K 1/6W CARBON	
	R569	QRD167J-152	1.5K 1/6W CARBON	
	R570	QRD167J-223	22K 1/6W CARBON	
	R573	QRD167J-104	100K 1/6W CARBON	
	R574	QRD167J-104	100K 1/6W CARBON	
	R575	ERD003J-681	680 R.NETWORK	
	R576	ERD003J-331	330 R.NETWORK	
	R577	QRD167J-821	820 1/6W CARBON	
	R578	QRD167J-391	390 1/6W CARBON	
	R579	QRD167J-104	100K 1/6W CARBON	
	R580	QRD167J-104	100K 1/6W CARBON	
Δ	R581	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
Δ	R582	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
Δ	R583	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
Δ	R584	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
Δ	R585	GRX012J-R22AM	0.22 1W M.FILM	
Δ	R586	GRX012J-R22AM	0.22 1W M.FILM	
Δ	R587	QRD14CJ-101S	100 1/4W UNF. CARBON	A
Δ	R587	QRD14CJ-101S	100 1/4W UNF. CARBON	B
Δ	R587	QRZ0077-101	100 1/4W FUSIBLE	C
Δ	R587	QRZ0077-101	100 1/4W FUSIBLE	D
Δ	R587	QRZ0077-101	100 1/4W FUSIBLE	E
Δ	R587	QRZ0077-101	100 1/4W FUSIBLE	FBS
Δ	R587	QRZ0077-101	100 1/4W FUSIBLE	G
Δ	R587	QRZ0077-101	100 1/4W FUSIBLE	
Δ	R588	QRZ0077-100	10 1/4W FUSIBLE	
Δ	R589	QRD14CJ-100S	10 1/4W UNF. CARBON	
Δ	R590	QRD14CJ-100S	10 1/4W UNF. CARBON	
Δ	R591	QRD14CJ-100S	10 1/4W UNF. CARBON	
Δ	R592	QRD14CJ-100S	10 1/4W UNF. CARBON	
Δ	R593	QRZ0077-121	120 1/4W FUSIBLE	
Δ	R594	QRD14CJ-4R7S	4.7 1/4W UNF. CARBON	
Δ	R595	QRD167J-474	470K 1/6W CARBON	
	R596	QRD167J-103	10K 1/6W CARBON	
	R597	QRD167J-104	100K 1/6W CARBON	
	R598	QRD167J-104	100K 1/6W CARBON	
	R599	QRD167J-103	10K 1/6W CARBON	
	R649	QRD167J-104	100K 1/6W CARBON	
	R737	QRD167J-392	3.9K 1/6W CARBON	
	R738	QRD167J-392	3.9K 1/6W CARBON	
	R739	QRD167J-471	470 1/6W CARBON	
	R740	QRD167J-471	470 1/6W CARBON	
	R741	QRD167J-153	15K 1/6W CARBON	
	R742	QRD167J-272	2.7K 1/6W CARBON	
	R746	QRD167J-333	33K 1/6W CARBON	
	R748	QRD167J-223	22K 1/6W CARBON	
	R749	QRD167J-392	3.9K 1/6W CARBON	
	R750	QRD167J-104	100K 1/6W CARBON	
	R751	QRD167J-104	100K 1/6W CARBON	
	R764	QRD167J-472	4.7K 1/6W CARBON	
	R765	QRD167J-472	4.7K 1/6W CARBON	
	R766	QRD167J-472	4.7K 1/6W CARBON	
	R767	QRD167J-472	4.7K 1/6W CARBON	
	R768	QRD167J-103	10K 1/6W CARBON	
	R769	QRD167J-103	10K 1/6W CARBON	
	R770	QRD167J-103	10K 1/6W CARBON	
	R771	QRD167J-103	10K 1/6W CARBON	
	R772	QRD167J-103	10K 1/6W CARBON	
	R773	QRD167J-223	22K 1/6W CARBON	
	R774	QRD167J-133	13K 1/6W CARBON	
	R775	QRD167J-133	13K 1/6W CARBON	
	R777	QRD167J-242	2.4K 1/6W CARBON	
	R778	QRD167J-242	2.4K 1/6W CARBON	
	R779	QRD167J-822	8.2K 1/6W CARBON	
	R780	QRD167J-822	8.2K 1/6W CARBON	
	R781	QRD167J-222	2.2K 1/6W CARBON	
	R782	QRD167J-222	2.2K 1/6W CARBON	
	R783	QRD167J-562	5.6K 1/6W CARBON	
	R784	QRD167J-562	5.6K 1/6W CARBON	
	R785	QRD167J-152	1.5K 1/6W CARBON	
	R786	QRD167J-152	1.5K 1/6W CARBON	
	R787	QRD167J-103	10K 1/6W CARBON	
	R788	QRD167J-103	10K 1/6W CARBON	
	R789	QRD167J-392	3.9K 1/6W CARBON	
	R791	QRD167J-102	1K 1/6W CARBON	
	R792	QRD167J-102	1K 1/6W CARBON	
	R793	QRD167J-102	1K 1/6W CARBON	
	R794	QRD167J-102	1K 1/6W CARBON	
	R795	QRD167J-222	2.2K 1/6W CARBON	
	R797	QRD167J-102	1K 1/6W CARBON	
	R801	QRD167J-102	1K 1/6W CARBON	
	R802	QRD167J-102	1K 1/6W CARBON	

Δ : SAFETY PARTS

Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10131-002	CIRCUIT BOARD	A
		EMW10131-002	CIRCUIT BOARD	B
		EMW10131-102	CIRCUIT BOARD	C
		E67132-T2R5	FUSE LABEL	C
		EMW10131-102	CIRCUIT BOARD	D

Δ : SAFETY PARTS

Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10131-102	CIRCUIT BOARD	E
		EMW10131-102BS	CIRCUIT BOARD	FBS
		EMW10131-102	CIRCUIT BOARD	G
	J001	QMS3L10-0A0	MINI JACK	
	J002	QMS3L10-0A0	MINI JACK	
	J003	VMC0107-003	CONNECT TERMINAL	C
	J003	VMC0107-003	CONNECT TERMINAL	D
	J003	VMC0107-003	CONNECT TERMINAL	E
	J003	VMC0107-003	CONNECT TERMINAL	FBS
	J003	VMC0107-003	CONNECT TERMINAL	G
	J004	VMC0107-003	CONNECT TERMINAL	C
	J004	VMC0107-003	CONNECT TERMINAL	D
	J004	VMC0107-003	CONNECT TERMINAL	E
	J004	VMC0107-003	CONNECT TERMINAL	FBS
	J004	VMC0107-003	CONNECT TERMINAL	G
	J500	EMV7122-103	CONNECTOR (SPEN)	
	J504	EMV7122-103	CONNECTOR (SPEN)	
	J520	EMB90TV-803A	SPEAKER TERMINAL	
	J521	ENM00TV-209A	2P PIN JACK	
	K503	ENZ8101-007	INDUCTOR	C
	K503	ENZ8101-007	INDUCTOR	D
	K503	ENZ8101-007	INDUCTOR	E
	K503	ENZ8101-007	INDUCTOR	FBS
	K503	ENZ8101-007	INDUCTOR	G
	K510	ENZ8101-007	INDUCTOR	C
	K510	ENZ8101-007	INDUCTOR	D
	K510	ENZ8101-007	INDUCTOR	E
	K510	ENZ8101-007	INDUCTOR	FBS
	K510	ENZ8101-007	INDUCTOR	G
	K511	ENZ8101-007	INDUCTOR	C
	K511	ENZ8101-007	INDUCTOR	D
	K511	ENZ8101-007	INDUCTOR	E
	K511	ENZ8101-007	INDUCTOR	FBS
	K511	ENZ8101-007	INDUCTOR	G
	K512	ENZ8101-007	INDUCTOR	C
	K512	ENZ8101-007	INDUCTOR	D
	K512	ENZ8101-007	INDUCTOR	E
	K512	ENZ8101-007	INDUCTOR	FBS
	K512	ENZ8101-007	INDUCTOR	G
	K513	ENZ8101-007	INDUCTOR	C
	K513	ENZ8101-007	INDUCTOR	D
	K513	ENZ8101-007	INDUCTOR	E
	K513	ENZ8101-007	INDUCTOR	FBS
	K513	ENZ8101-007	INDUCTOR	G
	L501	EQL0001-R45	INDUCTOR	
	L502	EQL0001-R45	INDUCTOR	
	L571	EQL0001-R45	INDUCTOR	
	L572	EQL0001-R45	INDUCTOR	
	EP002	E70859-001	EARTH PLATE	A
	EP002	E70859-001	EARTH PLATE	B
	FT001	EMG7331-002	FUSE CLIP	
	FT002	EMG7331-002	FUSE CLIP	C
	FT011	EMG7331-002U	FUSE CLIP	
	FT022	EMG7331-002U	FUSE CLIP	C
	FT101	EMG7331-002	FUSE CLIP	
	FT102	EMG7331-002U	FUSE CLIP	
	FT103	EMG7331-002	FUSE CLIP	
	FT104	EMG7331-002U	FUSE CLIP	
	FW002	EW33E-16SST	FLAT WIRE (SPEN)	
	FW004	EW33E-20SST	FLAT WIRE (SPEN)	
	FW501	EW33E-30SST	FLAT WIRE (SPEN)	
	FW502	EW33E-20LST	FLAT WIRE (SPEN)	
	JA001	EMV7127-015	CONNECTOR (15PIN)	
	JA002	EMV7127-013	CONNECTOR (13PIN)	
	JA003	EMV7127-011	CONNECTOR (11PIN)	
	JA501	EMV7125-009R	CONNECTOR (SPEN)	
	JA502	EMV7125-009R	CONNECTOR (SPEN)	
	JB501	EMV5125-009	PLUG ASSY (SPEN)	
	JB502	EMV5125-009	PLUG ASSY (SPEN)	
	JB503	EMV5125-015	PLUG ASSY (15PIN)	
	JB504	EMV5125-008	PLUG ASSY (SPEN)	
	JB505	EMV5125-012	PLUG ASSY (12PIN)	
	JB506	EMV5125-012	PLUG ASSY (12PIN)	
	JB507	EMV5125-014	PLUG ASSY (14PIN)	
	JB508	EMV5125-010	PLUG ASSY (10PIN)	
	JB509	EMV5125-009	PLUG ASSY (SPEN)	
	JB901	EMV7123-037	CONNECTOR (37PIN)	
	JT011	EMV7122-005	CONNECTOR (SPEN) A part of J511	
	JT012	EMV7122-005	CONNECTOR (SPEN) A part of J502	
	JT111	EMV7122-005	CONNECTOR (SPEN) A part of J511	
	JT112	EMV7122-103	CONNECTOR (SPEN) A part of J502	
	RY001	ESK1D12-211M	RELAY	
	RY500	ESK8D12-211M	RELAY	
	RY501	ESK8D12-211M	RELAY	
	RY502	ESK8D24-212	RELAY	
	SR500	ERT-D2WHK202S	NEGATIVE THERMISTOR	
	TB001	E65508-002	TAB	
	TB002	E65508-002	TAB	

Δ : SAFETY PARTS

Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C505	QCBB1HK-221	220PF 50V CERAMIC	
	C506	QCBB1HK-820	82PF 50V CERAMIC	
	C507	EEZ5009-105	1MF ELECTRO	
	C508	EEZ2505-107	100MF ELECTRO	
	C509	QCS21HJ-5R0	5PF 50V CERAMIC	
	C510	QCS21HJ-5R0	5PF 50V CERAMIC	
	C511	QETB1EM-226	22MF 25V ELECTRO	
	C512	QETB1EM-226	22MF 25V ELECTRO	
	C514	QFNB1HK-104	0.1MF 50V MYLAR	
	C515	QFVB1HJ-104	0.1MF 50V T. FILM	
	C516	QFVB1HJ-104	0.1MF 50V T. FILM	
	C517	QKS11CM-226	22MF 16V ELECTRO	
	C518	QKS11CM-476	47MF 16V ELECTRO	
	C519	QKS11EM-106	10MF 25V ELECTRO	
	C520	QETB1EM-106	10MF 25V ELECTRO	
	C521	QKS11CM-476	47MF 16V ELECTRO	
	C531	QKS11CM-226	22MF 16V ELECTRO	
	C532	QKS11CM-226	22MF 16V ELECTRO	
	C552	QETB1HM-105	1MF 50V ELECTRO	
	C554	QCSB1HJ-100	100PF 50V CERAMIC	
	C555	QKS11HM-1056	1MF 50V ELECTRO	
	C557	QCSB1HJ-100	100PF 50V CERAMIC	
	C558	QKS11CM-226	22MF 16V ELECTRO	
	C567	QFVB1HJ-104	0.1MF 50V T. FILM	
	C568	QFVB1HJ-104	0.1MF 50V T. FILM	
	C570	QETB2AK-476	47MF 100V ELECTRO	
	C571	EEZ5009-106	10MF ELECTRO	
	C572	EEZ5009-106	10MF ELECTRO	
	C573	QCBB1HK-101	100PF 50V CERAMIC	
	C574	QCBB1HK-101	100PF 50V CERAMIC	
	C575	QCBB1HK-221	220PF 50V CERAMIC	
	C576	QCBB1HK-820	82PF 50V CERAMIC	
	C577	EEZ5009-105	1MF ELECTRO	
	C578	EEZ2505-107	100MF ELECTRO	
	C579	QCS21HJ-5R0	5PF 50V CERAMIC	
	C580	QCS21HJ-5R0	5PF 50V CERAMIC	
	C581	QETB1EM-226	22MF 25V ELECTRO	
	C582	QETB1EM-226	22MF 25V ELECTRO	
	C585	QFVB1HJ-104	0.1MF 50V T. FILM	
	C586	QFVB1HJ-104	0.1MF 50V T. FILM	
	C587	QFVB1HJ-104	0.1MF 50V T. FILM	
	C588	QFVB1HJ-104	0.1MF 50V T. FILM	
	C591	QFN32AK-104	0.1MF 100V MYLAR	
	C592	QFN82AK-103	0.01MF 100V MYLAR	
	C593	QFN82AK-103	0.01MF 100V MYLAR	
	C594	QFNB1HK-104	0.1MF 50V MYLAR	
	C595	QFNB1HK-104	0.1MF 50V MYLAR	
	C597	QFNB1HK-104	0.1MF 50V MYLAR	
	C599	QCVB1CM-103	0.01MF 16V CERAMIC	
	C701	QFVB1HJ-104	0.1MF 50V T. FILM	
	C702	QFVB1HJ-104	0.1MF 50V T. FILM	
	C703	QFVB1HJ-104	0.1MF 50V T. FILM	
	C704	QFVB1HJ-104	0.1MF 50V T. FILM	
	C705	QETB1HM-105	1MF 50V ELECTRO	
	C706	QETB1HM-105	1MF 50V ELECTRO	
	C707	QETB1HM-105	1MF 50V ELECTRO	
	C708	QETB1HM-105	1MF 50V ELECTRO	

Δ : SAFETY PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R001	QRG022J-221A	220 2W O.M. FILM	
	R002	QRD167J-223	22K 1/6W CARBON	
	R003	QRD167J-222	2.2K 1/6W CARBON	
	R005	QRC128K-275EM	2.7M 1/2W COMPOS	A
	R005	QRC128K-275EM	2.7M 1/2W COMPOS	B
	R007	PTH61G306D2R2N	FUSIBLE	
	R008	QRD167J-332	3.3K 1/6W CARBON	
	R010	QRD14CJ-471S	470 1/4W UNF. CARBON	
	R015	QRD167J-271	270 1/6W CARBON	
	R016	QRD167J-562	5.6K 1/6W CARBON	
	R021	QRD167J-562	5.6K 1/6W CARBON	
	R022	QRD167J-562	5.6K 1/6W CARBON	
	R024	QRG022J-271A	270 2W O.M. FILM	
	R025	QRG022J-271A	270 2W O.M. FILM	
	R027	QRD14CJ-100S	10 1/4W UNF. CARBON	A
	R027	QRZ0077-100	10 1/4W FUSIBLE	B
	R027	QRZ0077-100	10 1/4W FUSIBLE	C
	R027	QRZ0077-100	10 1/4W FUSIBLE	D
	R027	QRZ0077-100	10 1/4W FUSIBLE	E
	R027	QRZ0077-100	10 1/4W FUSIBLE	FBS
	R027	QRZ0077-100	10 1/4W FUSIBLE	G
	R028	QRD14CJ-100S	10 1/4W UNF. CARBON	A
	R028	QRZ0077-100	10 1/4W FUSIBLE	B
	R028	QRZ0077-100	10 1/4W FUSIBLE	C
	R028	QRZ0077-100	10 1/4W FUSIBLE	D

Δ : SAFETY PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R028	QRZ0077-100	10 1/4W FUSIBLE	E
	R028	QRZ0077-100	10 1/4W FUSIBLE	FBS
	R028	QRZ0077-100	10 1/4W FUSIBLE	G
	R029	QRD14CJ-100S	10 1/4W UNF. CARBON	A
	R029	QRZ0077-100	10 1/4W FUSIBLE	B
	R029	QRZ0077-100	10 1/4W FUSIBLE	C
	R029	QRZ0077-100	10 1/4W FUSIBLE	D
	R029	QRZ0077-100	10 1/4W FUSIBLE	E
	R029	QRZ0077-100	10 1/4W FUSIBLE	FBS
	R029	QRZ0077-100	10 1/4W FUSIBLE	G
	R030	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R030	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	B
	R031	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R031	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	B
	R032	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R032	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	B
	R033	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R033	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	B
	R034	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R034	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	B
	R036	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R036	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	B
	R037	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R037	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	B
	R039	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R039	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	B
	R041	QRD14CJ-220S	22 1/4W UNF. CARBON	A
	R041	QRD14CJ-220S	22 1/4W UNF. CARBON	B
	R042	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
	R044	QRD14CJ-5R6S	5.6 1/4W UNF. CARBON	A
	R044	QRD14CJ-5R6S	5.6 1/4W UNF. CARBON	B
	R044	QRZ0077-6R8	6.8 1/4W FUSIBLE	C
	R044	QRZ0077-5R6	5.6 1/4W FUSIBLE	D
	R044	QRZ0077-5R6	5.6 1/4W FUSIBLE	E
	R044	QRZ0077-5R6	5.6 1/4W FUSIBLE	FBS
	R044	QRZ0077-5R6	5.6 1/4W FUSIBLE	G
	R500	QRG022J-820A	82 2W O.M. FILM	
	R503	QRD167J-104	100K 1/6W CARBON	
	R504	QRD167J-104	100K 1/6W CARBON	
	R505	ERD005J-681	680 P. NETWORK	
	R506	ERD005J-331	330 R. NETWORK	
	R507	QRD167J-821	820 1/6W CARBON	
	R508	QRD167J-391	390 1/6W CARBON	
	R509	QRD167J-104	100K 1/6W CARBON	
	R510	QRD167J-104	100K 1/6W CARBON	
	R511	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
	R512	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
	R513	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
	R514	QRD14CJ-272S	2.7K 1/4W UNF. CARBON	
	R515	QRX012J-R22AM	0.22 1W M. FILM	
	R516	QRX012J-R22AM	0.22 1W M. FILM	
	R517	QRD14CJ-101S	100 1/4W UNF. CARBON	A
	R517	QRD14CJ-101S	100 1/4W UNF. CARBON	B
	R517	QRZ0077-101	100 1/4W FUSIBLE	C
	R517	QRZ0077-101	100 1/4W FUSIBLE	D
	R517	QRZ0077-101	100 1/4W FUSIBLE	E
	R517	QRZ0077-101	100 1/4W FUSIBLE	FBS
	R517	QRZ0077-101	100 1/4W FUSIBLE	G
	R518	QRZ0077-100	10 1/4W FUSIBLE	
	R519	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R520	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R521	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R522	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R523	QRD167J-104	100K 1/6W CARBON	
	R524	QRD167J-823	82K 1/6W CARBON	
	R525	QRD167J-474	470K 1/6W CARBON	
	R527	QRD167J-303	30K 1/6W CARBON	
	R528	QRD167J-562	5.6K 1/6W CARBON	
	R529	QRD167J-103	10K 1/6W CARBON	
	R530	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R531	QRD167J-103	10K 1/6W CARBON	
	R532	QRD167J-104	100K 1/6W CARBON	
	R533	QRD167J-103	10K 1/6W CARBON	
	R534	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R535	QRD167J-222	2.2K 1/6W CARBON	
	R536	QRD167J-222	2.2K 1/6W CARBON	
	R537	QRD167J-104	100K 1/6W CARBON	
	R538	QRD167J-751	750 1/6W CARBON	
	R539	QRD167J-362	3.6K 1/6W CARBON	
	R540	QRD167J-181	180 1/6W CARBON	
	R541	QRD167J-820	82 1/6W CARBON	
	R543	QRD167J-104	100K 1/6W CARBON	
	R544	QRD167J-823	82K 1/6W CARBON	
	R545	QRD167J-153	15K 1/6W CARBON	
	R546	QRD167J-153	15K 1/6W CARBON	
	R548	QRD167J-103	10K 1/6W CARBON	
	R549	QRG022J-122A	1.2K 2W O.M. FILM	
	R550	QRZ0077-100	10 1/4W FUSIBLE	
	R557	QRD167J-104	100K 1/6W CARBON	
	R558	QRD167J-823	82K 1/6W CARBON	

Δ : SAFETY PARTS

Transistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q542	2SD2061(E,F)	SILICON ROHM	
	Q543	2SD2061(E,F)	SILICON ROHM	
	Q544	2SK246(GR,BL)	F.E.T TOSHIBA	
	Q545	2TC144ES	SILICON ROHM	
	Q546	2TC144ES	SILICON ROHM	
	Q547	2TC114YS	SILICON ROHM	
	Q548	2TA144ES	SILICON ROHM	
	Q549	2TA114YS	SILICON ROHM	
	Q550	2TC144ES	SILICON ROHM	
	Q551	2TC114YS	SILICON ROHM	
	Q552	2TA144ES	SILICON ROHM	
	Q600	2SC458(C)	SILICON HITACHI	
	Q601	2SA933S(S)	SILICON ROHM	
	Q604	2TC114YS	SILICON ROHM	
	Q895	2SD2144S(VW)	SILICON ROHM	
	Q896	2SD2144S(VW)	SILICON ROHM	

Δ : SAFETY PARTS

I.C.s.

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC501	SI-18751	I.C. SANKEN	
	IC502	SI-18751	I.C. SANKEN	
	IC505	LA2730	I.C. SANYO	
	IC510	TC9164N	I.C. TOSHIBA	
	IC511	BA15218N	I.C. ROHM	
	IC512	BA15218N	I.C. ROHM	
	IC513	LC4966	I.C. SANYO	
	IC514	LB1639-CV	I.C. SANYO	
	IC515	VC4580LD	I.C. DAINICHI	
	IC600	LA7952	I.C. SANYO	
	IC808	VC4580L	I.C. DAINICHI	
	IC809	BA15218N	I.C. ROHM	
	IC810	BA15218N	I.C. ROHM	

Δ : SAFETY PARTS

Diodes

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D029	1SR139-200	SILICON ROHM	
	D513	1SS133	SILICON ROHM	
	D514	MT213JC	ZENER ROHM	
	D515	RD13JSB3	ZENER NEC	
	D516	MT211JC	ZENER ROHM	
	D517	MT26.2JC	ZENER ROHM	
	D518	1SS133	SILICON ROHM	
	D519	RD12JSB3	ZENER NEC	
	D532	MT213JC	ZENER ROHM	
	D533	MT212JC	ZENER ROHM	
	D534	MT212JC	ZENER ROHM	
	D535	MT215JC	ZENER ROHM	
	D536	MT212JC	ZENER ROHM	
	D537	MT215JC	ZENER ROHM	
	D538	MT26.8JC	ZENER ROHM	
	D875	MT210JC	ZENER ROHM	
	D876	MT210JC	ZENER ROHM	

Δ : SAFETY PARTS

Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C520	QCVB1CM-103	0.01MF 16V CERAMIC	
	C521	QETB1CM-226	22MF 16V ELECTRO	
	C522	QETB1CM-226	22MF 16V ELECTRO	
	C523	QERS1EM-106	10MF 25V ELECTRO	
	C524	QERS1EM-106	10MF 25V ELECTRO	
	C525	QFV81HJ-104	0.1MF 50V T.FILM	
	C526	QFV81HJ-104	0.1MF 50V T.FILM	
	C527	QCBB1HK-101	100PF 50V CERAMIC	
	C528	QCBB1HK-101	100PF 50V CERAMIC	
	C531	QCVB1CM-103	0.01MF 16V CERAMIC	
	C532	QCVB1CM-103	0.01MF 16V CERAMIC	
	C533	QERS1EM-106	10MF 25V ELECTRO	
	C534	QERS1EM-1056	1MF 50V ELECTRO	
	C535	QERS1EM-1056	1MF 50V ELECTRO	
	C536	QETB1CM-226	22MF 16V ELECTRO	
	C537	QCVB1CM-103	0.01MF 16V CERAMIC	
	C539	QERS1CM-226	22MF 16V ELECTRO	
	C540	QCVB1CM-103	0.01MF 16V CERAMIC	
	C541	QETB1CM-476	47MF 16V ELECTRO	
	C542	QETB1CM-226	22MF 16V ELECTRO	
	C543	QETB1HM-475	4.7MF 50V ELECTRO	
	C544	QETB1HM-475	4.7MF 50V ELECTRO	
	C545	QETB1EM-106	10MF 25V ELECTRO	
	C546	QETB1EM-106	10MF 25V ELECTRO	
	C547	QETB1EM-106	10MF 25V ELECTRO	

Δ : SAFETY PARTS

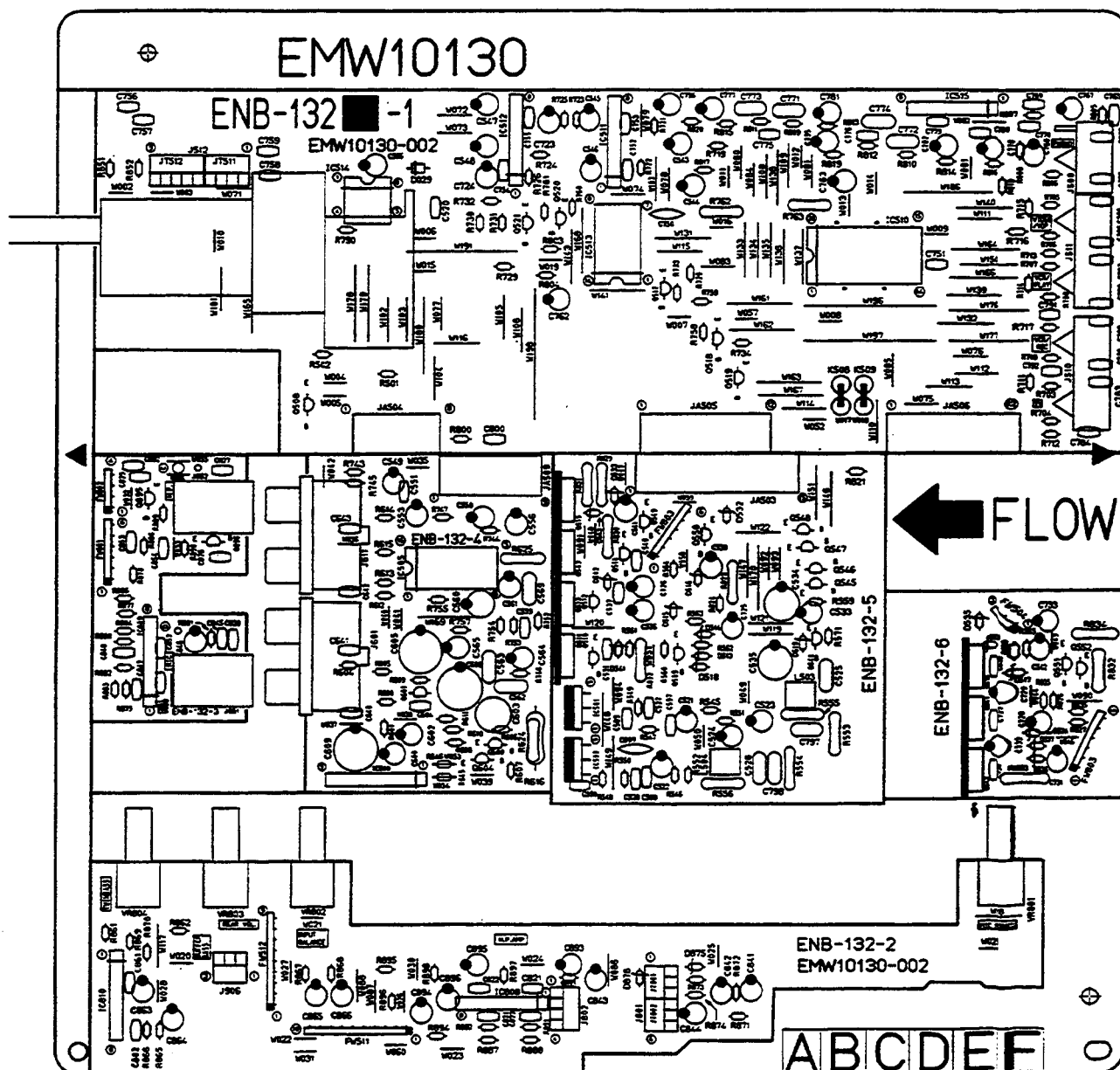
Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C548	QETB1EM-106	10MF 25V ELECTRO	
	C549	QETB1HM-105	1MF 50V ELECTRO	
	C550	QETB1EM-106	10MF 25V ELECTRO	
	C551	QCBB1NK-471	470PF 50V CERAMIC	
	C553	QETB1HM-105	1MF 50V ELECTRO	
	C556	QETB1HM-105	1MF 50V ELECTRO	
	C559	QCXB1CM-472	4700PF 16V CERAMIC	
	C560	QETB1CM-107	100MF 16V ELECTRO	
	C561	QETB1CM-226	22MF 16V ELECTRO	
	C562	QFV81HJ-333	0.033MF 50V T.FILM	
	C563	QFV81HJ-104	0.1MF 50V T.FILM	
	C564	QETB1HM-105	1MF 50V ELECTRO	
	C565	QERS1HM-334	0.33MF 50V LLC ELECTR	
	C566	QETB1AM-476	47MF 10V ELECTRO	
	C569	QFV81HJ-333	0.033MF 50V T.FILM	
	C597	QCBB1HK-331	330PF 50V CERAMIC	
	C598	QCBB1HK-331	330PF 50V CERAMIC	
	C600	QETB1AM-476	47MF 10V ELECTRO	
	C602	QETB1AM-476	47MF 10V ELECTRO	
	C603	QENS1CM-476	47MF 16V NON POLE	
	C604	QCBB1HJ-680	68PF 50V CERAMIC	
	C605	QETBOJM-108	1000MF 6.3V ELECTRO	
	C608	QETBOJM-108	1000MF 6.3V ELECTRO	
	C609	EET1604-108M	1000MF ELECTRO	
	C723	EEZ5009-106	10MF ELECTRO	
	C724	EEZ5009-106	10MF ELECTRO	
	C725	QERS1CM-476	47MF 16V ELECTRO	
	C726	QETB1CM-476	47MF 16V ELECTRO	
	C727	QCVB1CM-103	0.01MF 16V CERAMIC	
	C728	QETB1CM-226	22MF 16V ELECTRO	
	C729	QENC1EM-476	47MF 25V ELECTRO	
	C730	QCVB1CM-103	0.01MF 16V CERAMIC	
	C731	QETB1CM-226	22MF 16V ELECTRO	
	C732	QENC1EM-476	47MF 25V ELECTRO	
	C735	QETB1AM-476	47MF 10V ELECTRO	
	C762	EEZ2505-107	100MF ELECTRO	
	C763	EEZ2505-107	100MF ELECTRO	
	C765	QCBB1HK-101	100PF 50V CERAMIC	A
	C765	QCBB1HK-221	220PF 50V CERAMIC	B
	C765	QCBB1HK-221	220PF 50V CERAMIC	C
	C766	QCBB1HK-101	100PF 50V CERAMIC	A
	C766	QCBB1HK-221	220PF 50V CERAMIC	B
	C766	QCBB1HK-221	220PF 50V CERAMIC	C
	C767	QETB1HM-475	4.7MF 50V ELECTRO	
	C768	QETB1HM-475	4.7MF 50V ELECTRO	
	C769	QCBB1HK-101	100PF 50V CERAMIC	
	C770	QCBB1HK-101	100PF 50V CERAMIC	
	C771	QFN81HJ-682	6800PF 50V MYLAR	
	C772	QFN81HJ-682	6800PF 50V MYLAR	
	C773	QFN81HJ-182	1800PF 50V MYLAR	
	C774	QFN81HJ-182	1800PF 50V MYLAR	
	C775	QCBB1HK-101	100PF 50V CERAMIC	
	C776	QCBB1HK-101	100PF 50V CERAMIC	
	C777	QETB1HM-475	4.7MF 50V ELECTRO	
	C778	QETB1HM-475	4.7MF 50V ELECTRO	
	C779	QCBB1HK-101	100PF 50V CERAMIC	
	C780	QCBB1HK-101	100PF 50V CERAMIC	
	C781	QETB1EM-476	47MF 25V ELECTRO	
	C782	QETB1EM-476	47MF 25V ELECTRO	
	C783	QCBB1HK-331	330PF 50V CERAMIC	
	C784	QCBB1HK-331	330PF 50V CERAMIC	
	C785	QCBB1HK-331	330PF 50V CERAMIC	
	C786	QCBB1HK-331	330PF 50V CERAMIC	
	C787	QCBB1HK-331	330PF 50V CERAMIC	
	C788	QCBB1HK-331	330PF 50V CERAMIC	
	C789	QCBB1HK-221	220PF 50V CERAMIC	
	C790	QCBB1HK-221	220PF 50V CERAMIC	
	C791	QCBB1HK-221	220PF 50V CERAMIC	
	C792	QCBB1HK-221	220PF 50V CERAMIC	
	C793	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C795	QETB1EM-476	47MF 25V ELECTRO	
	C796	QETB1EM-476	47MF 25V ELECTRO	
	C797	QFV81HJ-104	0.1MF 50V T.FILM	
	C798	QFV81HJ-104	0.1MF 50V T.FILM	
	C800	QCBB1HK-102	1000PF 50V CERAMIC	
	C821	QCBB1HK-101	100PF 50V CERAMIC	
	C822	QCBB1HK-101	100PF 50V CERAMIC	
	C823	QCSB1HJ-470	47PF 50V CERAMIC	
	C824	QCSB1HJ-470	47PF 50V CERAMIC	
	C825	QCBB1HK-331	330PF 50V CERAMIC	
	C825	QCBB1HK-331	330PF 50V CERAMIC	
	C826	QCBB1HK-331	330PF 50V CERAMIC	
	C826	QCBB1HK-331	330PF 50V CERAMIC	
	C827	QCBB1HK-331	330PF 50V CERAMIC	
	C827	QCBB1HK-331	330PF 50V CERAMIC	
	C828	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C841	QETB1HM-106	10MF 50V ELECTRO	
	C842	QETB1HM-106	10MF 50V ELECTRO	
	C843	QETB1EM-106	10MF 25V ELECTRO	
	C844	QETB1EM-106	10MF 25V ELECTRO	
	C845	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C846	QERS1CM-1066	10MF 16V ELECTRO	
	C847	QCBB1HK-221	220PF 50V CERAMIC	
	C848	QCBB1HK-221	220PF 50V CERAMIC	
	C851	QCBB1HK-101	100PF 50V CERAMIC	

Δ : SAFETY PARTS

■ ENB-132 □ Rear Amplifier & Source Select PC Board Ass'y

Note : ENB-132 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENB-132 A	the U.S.A. , Canada
ENB-132 B	Australia, the U.K. Continental Europe Universal Type
ENB-132 C	Germany , Italy

Transistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q508	DTC144ES	SILICON ROHM	
	Q509	2SC1685(Q,R)	SILICON MATSUSHITA	
	Q510	2SA564A(Q,R)	SILICON MATSUSHITA	
	Q511	2SB1187(E,F)	SILICON ROHM	
	Q512	2SA564A(Q,R)	SILICON MATSUSHITA	
	Q513	2SB1187(E,F)	SILICON ROHM	
	Q514	2SC1685(Q,R)	SILICON MATSUSHITA	
	Q515	2SD2061(E,F)	SILICON ROHM	
	Q516	2SD2061(E,F)	SILICON ROHM	
	Q517	2SD2144S(VW)	SILICON ROHM	
	Q518	2SD2144S(VW)	SILICON ROHM	
	Q519	DTA144ES	SILICON ROHM	
	Q520	DTA144ES	SILICON ROHM	
	Q521	DTA144ES	SILICON ROHM	
	Q541	2SB1187(F,G)	SILICON ROHM	

Δ : SAFETY PARTS

Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C852	QCB81MK-101	100PF 50V CERAMIC	
	C853	QCB81EZ-223	0.022MF 25V CERAMIC	
	C854	QCB81CM-103	0.01MF 16V CERAMIC	
	C861	QCB81MK-101	100PF 50V CERAMIC	
	C862	QCB81MK-101	100PF 50V CERAMIC	
	C863	QETB1HM-475	4.7MF 50V ELECTRO	
	C864	QETB1HM-475	4.7MF 50V ELECTRO	
	C865	QETB1HM-475	4.7MF 50V ELECTRO	
	C866	QETB1HM-475	4.7MF 50V ELECTRO	
	C892	QCB81EZ-223	0.022MF 25V CERAMIC	
	C893	QER61EM-475G	4.7MF 25V ELECTRO	
	C894	QER61EM-475G	4.7MF 25V ELECTRO	
	C895	QER61EM-475G	4.7MF 25V ELECTRO	
	C896	QER61EM-475G	4.7MF 25V ELECTRO	
	C899	SCF21HP-103	0.01MF 50V CERAMIC	

Δ SAFETY PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R501	QRD167J-331	330 1/6W CARBON	
	R502	QRD167J-331	330 1/6W CARBON	
	R545	QRD167J-103	10K 1/6W CARBON	
	R546	QRD167J-103	10K 1/6W CARBON	
	R547	QRD167J-103	10K 1/6W CARBON	
	R548	QRD167J-103	10K 1/6W CARBON	
	R549	QRD167J-103	10K 1/6W CARBON	
	R550	QRD167J-103	10K 1/6W CARBON	
	R551	QRD167J-391	390 1/6W CARBON	
	R552	QRD167J-391	390 1/6W CARBON	
Δ	R553	QRD14CJ-1R0S	1 1/4W UNF. CARBON	
Δ	R554	QRD14CJ-1R0S	1 1/4W UNF. CARBON	
Δ	R555	QRD14CJ-100S	10 1/4W UNF. CARBON	
Δ	R556	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R559	QRD167J-103	10K 1/6W CARBON	
	R560	QRD167J-332	3.3K 1/6W CARBON	
	R561	QRD167J-332	3.3K 1/6W CARBON	
	R562	QRD167J-472	4.7K 1/6W CARBON	
	R563	QRD167J-222	2.2K 1/6W CARBON	
	R564	QRD167J-332	3.3K 1/6W CARBON	
	R565	QRD167J-103	10K 1/6W CARBON	A
	R565	QRD167J-512	5.1K 1/6W CARBON	B
	R565	QRD167J-512	5.1K 1/6W CARBON	C
	R571	QRD167J-271	270 1/6W CARBON	
	R600	QRD167J-750	75 1/6W CARBON	
	R601	QRD167J-100	10 1/6W CARBON	
	R604	QRD167J-750	75 1/6W CARBON	
	R605	QRD167J-100	10 1/6W CARBON	
	R606	QRD167J-222	2.2K 1/6W CARBON	
	R607	QRD167J-682	6.8K 1/6W CARBON	
	R608	QRD167J-123	12K 1/6W CARBON	
	R609	QRD167J-121	120 1/6W CARBON	
	R610	QRD167J-221	220 1/6W CARBON	
	R611	QRD167J-121	120 1/6W CARBON	
	R612	QRD167J-750	75 1/6W CARBON	
	R613	QRD167J-473	47K 1/6W CARBON	
	R614	QRD167J-750	75 1/6W CARBON	
	R615	QRD167J-473	47K 1/6W CARBON	
Δ	R616	QRG022J-221A	220 2W O.M. FILM	
Δ	R624	QRD14CJ-100S	10 1/4W UNF. CARBON	A
Δ	R624	QRZ0077-100	10 1/4W FUSIBLE	B
Δ	R624	QRZ0077-100	10 1/4W FUSIBLE	C
Δ	R625	QRD14CJ-100S	10 1/4W UNF. CARBON	A
Δ	R625	QRZ0077-100	10 1/4W FUSIBLE	B
Δ	R625	QRZ0077-100	10 1/4W FUSIBLE	C
	R701	QRD167J-153	15K 1/6W CARBON	
	R704	QRD167J-153	15K 1/6W CARBON	
	R705	QRD167J-153	15K 1/6W CARBON	
	R706	QRD167J-153	15K 1/6W CARBON	
	R707	QRD167J-153	15K 1/6W CARBON	
	R708	QRD167J-153	15K 1/6W CARBON	
	R711	QRD167J-104	100K 1/6W CARBON	
	R712	QRD167J-104	100K 1/6W CARBON	
	R713	QRD167J-104	100K 1/6W CARBON	
	R714	QRD167J-104	100K 1/6W CARBON	
	R715	QRD167J-104	100K 1/6W CARBON	
	R716	QRD167J-104	100K 1/6W CARBON	
	R717	QRD167J-471	470 1/6W CARBON	
	R718	QRD167J-471	470 1/6W CARBON	
	R719	QRD167J-104	100K 1/6W CARBON	
	R720	QRD167J-104	100K 1/6W CARBON	
	R721	QRD167J-104	100K 1/6W CARBON	
	R722	QRD167J-104	100K 1/6W CARBON	
	R723	QRD167J-332	3.3K 1/6W CARBON	
	R724	QRD167J-332	3.3K 1/6W CARBON	
	R725	QRD167J-104	100K 1/6W CARBON	
	R726	QRD167J-104	100K 1/6W CARBON	
	R729	QRD167J-471	470 1/6W CARBON	
	R730	QRD167J-471	470 1/6W CARBON	
	R731	QRD167J-104	100K 1/6W CARBON	

Δ SAFETY PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R732	QRD167J-104	100K 1/6W CARBON	
	R733	QRD167J-222	2.2K 1/6W CARBON	
	R734	QRD167J-222	2.2K 1/6W CARBON	
	R743	QRD167J-223	22K 1/6W CARBON	
	R744	QRD167J-103	10K 1/6W CARBON	
	R745	QRD167J-683	68K 1/6W CARBON	
	R747	QRD167J-153	15K 1/6W CARBON	
	R752	QRD167J-181	180 1/6W CARBON	
	R753	QRD167J-473	47K 1/6W CARBON	
	R754	QRD167J-332	3.3K 1/6W CARBON	
	R755	QRD167J-274	270K 1/6W CARBON	
	R756	QRD167J-622	6.2K 1/6W CARBON	
	R757	QRD167J-274	270K 1/6W CARBON	
	R758	QRD167J-103	10K 1/6W CARBON	
	R759	QRD167J-103	10K 1/6W CARBON	
	R760	QRD167J-472	4.7K 1/6W CARBON	
	R761	QRD167J-472	4.7K 1/6W CARBON	
Δ	R762	QRD14CJ-100S	10 1/4W UNF. CARBON	A
Δ	R762	QRZ0077-100	10 1/4W FUSIBLE	B
Δ	R762	QRZ0077-100	10 1/4W FUSIBLE	C
Δ	R763	QRD14CJ-100S	10 1/4W UNF. CARBON	A
Δ	R763	QRZ0077-100	10 1/4W FUSIBLE	B
Δ	R763	QRZ0077-100	10 1/4W FUSIBLE	C
	R790	QRD167J-123	12K 1/6W CARBON	
	R800	QRD167J-222	2.2K 1/6W CARBON	
	R803	QRD167J-132	1.3K 1/6W CARBON	
	R804	QRD167J-132	1.3K 1/6W CARBON	
	R805	QRD167J-222	2.2K 1/6W CARBON	
	R806	QRD167J-222	2.2K 1/6W CARBON	
	R807	QRD167J-473	47K 1/6W CARBON	
	R808	QRD167J-473	47K 1/6W CARBON	
	R809	QRD167J-474	470K 1/6W CARBON	
	R810	QRD167J-474	470K 1/6W CARBON	
	R811	QRD167J-393	39K 1/6W CARBON	
	R812	QRD167J-393	39K 1/6W CARBON	
	R813	QRD167J-112	1.1K 1/6W CARBON	
	R814	QRD167J-112	1.1K 1/6W CARBON	
	R815	QRD167J-152	1.5K 1/6W CARBON	
	R816	QRD167J-152	1.5K 1/6W CARBON	
	R817	QRD167J-104	100K 1/6W CARBON	
	R818	QRD167J-104	100K 1/6W CARBON	
	R819	QRD167J-681	680 1/6W CARBON	
	R820	QRD167J-681	680 1/6W CARBON	
	R821	QRD167J-103	10K 1/6W CARBON	
Δ	R822	QRD14CJ-1R0S	1 1/4W UNF. CARBON	
Δ	R823	QRD14CJ-2R7S	2.7 1/4W UNF. CARBON	A
Δ	R823	QRZ0076-2R7	2.7 1/4W FUSIBLE	B
Δ	R823	QRZ0076-2R7	2.7 1/4W FUSIBLE	C
	R824	QRD167J-103	10K 1/6W CARBON	
	R825	QRD167J-222	2.2K 1/6W CARBON	
	R826	QRD167J-103	10K 1/6W CARBON	
	R827	QRD167J-332	3.3K 1/6W CARBON	A
	R827	QRD167J-152	1.5K 1/6W CARBON	B
	R827	QRD167J-152	1.5K 1/6W CARBON	C
	R828	QRD167J-103	10K 1/6W CARBON	A
	R828	QRD167J-512	5.1K 1/6W CARBON	B
	R828	QRD167J-512	5.1K 1/6W CARBON	C
Δ	R829	QRD14CJ-1R0S	1 1/4W UNF. CARBON	
Δ	R830	QRD14CJ-1R0S	1 1/4W UNF. CARBON	
Δ	R831	QRD14CJ-1R0S	1 1/4W UNF. CARBON	
Δ	R832	QRD14CJ-100S	10 1/4W UNF. CARBON	A
Δ	R832	QRZ0077-100	10 1/4W FUSIBLE	B
Δ	R832	QRZ0077-100	10 1/4W FUSIBLE	C
Δ	R833	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
Δ	R833	QRZ0077-4R7	4.7 1/4W FUSIBLE	B
Δ	R833	QRZ0077-4R7	4.7 1/4W FUSIBLE	C
Δ	R834	QRD14CJ-3R9S	3.9 1/4W UNF. CARBON	A
Δ	R834	QRZ0077-4R7	4.7 1/4W FUSIBLE	B
Δ	R834	QRZ0077-4R7	4.7 1/4W FUSIBLE	C
	R835	QRD167J-103	10K 1/6W CARBON	
	R851	QRD167J-331	330 1/6W CARBON	
	R852	QRD167J-331	330 1/6W CARBON	
	R861	QRD167J-333	33K 1/6W CARBON	
	R862	QRD167J-333	33K 1/6W CARBON	
	R865	QRD167J-474	470K 1/6W CARBON	
	R866	QRD167J-474	470K 1/6W CARBON	
	R867	QRD167J-104	100K 1/6W CARBON	
	R868	QRD167J-104	100K 1/6W CARBON	
	R869	QRD167J-473	47K 1/6W CARBON	
	R870	QRD167J-473	47K 1/6W CARBON	
	R871	QRD167J-104	100K 1/6W CARBON	
	R872	QRD167J-104	100K 1/6W CARBON	
	R873	QRD167J-470	47 1/6W CARBON	
	R874	QRD167J-470	47 1/6W CARBON	
	R877	QRD167J-331	330 1/6W CARBON	
	R878	QRD167J-331	330 1/6W CARBON	
	R879	QRD167J-104	100K 1/6W CARBON	
	R880	QRD167J-104	100K 1/6W CARBON	
	R881	QRD167J-102	1K 1/6W CARBON	
	R882	QRD167J-103	10K 1/6W CARBON	
	R883	QRD167J-331	330 1/6W CARBON	
	R884	QRD167J-331	330 1/6W CARBON	
	R885	QRD167J-331	330 1/6W CARBON	
	R886	QRD167J-331	330 1/6W CARBON	
	R887	QRD167J-470	47 1/6W CARBON	

Δ SAFETY PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R888	QRD167J-470	47 1/6W CARBON	
	R889	QRD167J-103	10K 1/6W CARBON	
	R890	QRD167J-103	10K 1/6W CARBON	
	R891	QRD167J-473	47K 1/6W CARBON	
	R892	QRD167J-473	47K 1/6W CARBON	
	R893	QRD167J-332	5.3K 1/6W CARBON	
	R894	QRD167J-332	5.3K 1/6W CARBON	
	R895	QRD167J-221	220 1/6W CARBON	
	R896	QRD167J-221	220 1/6W CARBON	
	R897	QRD167J-224	220K 1/6W CARBON	
	R898	QRD167J-224	220K 1/6W CARBON	
	VR701	QVDC91Z-E02B	VARIABLE	
	VR801	QVAB80B-E54B	50K VARIABLE	
	VR802	QVAA80W-E15B	100K VARIABLE	
	VR803	QVAB80B-E14B	10K VARIABLE	
	VR804	QVAB80B-EF5B	250K VARIABLE	

Δ : SAFETY PARTS

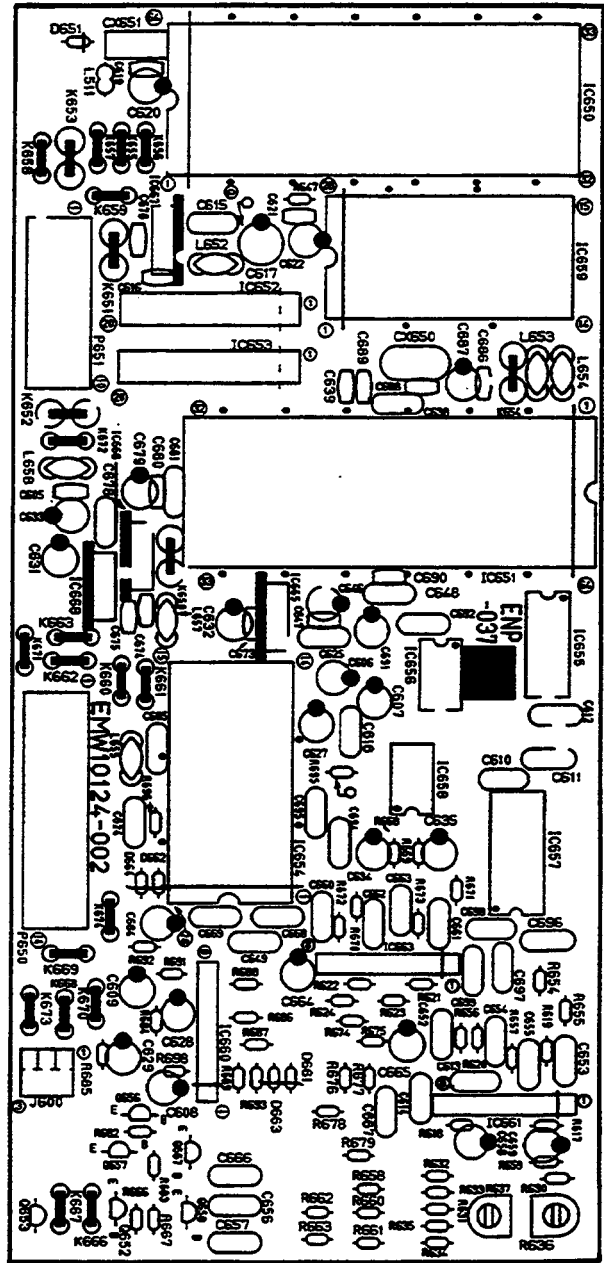
Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10130-002	CIRCUIT BOARD	
		EW7031-025	TERMINAL WIRE	
	JS00	EMN00TV-209A	2P PIN JACK	
	JS10	EMN00TV-412A	4P PIN JACK	
	JS11	EMN00TV-412A	4P PIN JACK	
	J601	EMN00YV-211A	2P PIN JACK	
	J611	EMN00YV-211A	2P PIN JACK	
	J802	EMV7122-004	CONNECTOR (4PIN)	
	J851	QMS3L10-ED0H	MINI JACK	
	J852	QMS3L10-ED0H	MINI JACK	
	J906	EMV7122-103	CONNECTOR (3PIN)	
	LS03	EQL0001-R45	INDUCTOR	
	LS04	EQL0001-R45	INDUCTOR	
	FW504	EW333B-30LST	FLAT WIRE (3PIN)	
	FW511	EW33AB-08LST	FLAT WIRE (8PIN)	
	FW512	EW339B-13LST	FLAT WIRE (6PIN)	
	FW801	EW336B-16LST	FLAT WIRE (6PIN)	
	FW802	EW334B-20LST	FLAT WIRE (4PIN)	
	FW803	EW356E-25SST	FLAT WIRE (6PIN)	
	JAS03	EMV7125-01SR	CONNECTOR (3PIN)	
	JAS04	EMV7125-008R	CONNECTOR (6PIN)	
	JAS05	EMV7125-012R	CONNECTOR (12PIN)	
	JAS06	EMV7125-012R	CONNECTOR (12PIN)	
	JAS09	EMV7125-009R	CONNECTOR (8PIN)	
	JT511	EMV7122-004	CONNECTOR (4PIN)	
	JT512	EMV7122-005	CONNECTOR (8PIN)	
	JT801	EMV7122-103	CONNECTOR (3PIN)	
	JT802	EMV7122-103	CONNECTOR (4PIN)	

Δ : SAFETY PARTS

■ ENP-037 □ DAP PC Board Ass'y

Note : ENP-037 □ varies according to the areas employed.
See note (1) when placing an order.



Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		ENW10124-002(S)	CIRCUIT BOARD	
		E3400-431	SPACER	B
		E3400-431	SPACER	C
	J600	ENV5111-003	PLUG ASSY	C
	J600	ENV5111-003	PLUG ASSY	C
	K650	ENZ8101-007	INDUCTOR	
	K651	ENZ8101-007	INDUCTOR	
	K652	ENZ8101-007	INDUCTOR	
	K653	ENZ8101-007	INDUCTOR	
	K654	ENZ8101-007	INDUCTOR	
	K655	ENZ8101-016	INDUCTOR	
	K656	ENZ8101-016	INDUCTOR	
	K657	ENZ8101-016	INDUCTOR	
	K658	ENZ8101-016	INDUCTOR	
	K659	ENZ8101-016	INDUCTOR	
	K660	ENZ8101-016	INDUCTOR	
	K661	ENZ8101-016	INDUCTOR	
	K662	ENZ8101-016	INDUCTOR	
	K663	ENZ8101-016	INDUCTOR	
	K666	ENZ8101-016	INDUCTOR	

Δ : SAFETY PARTS

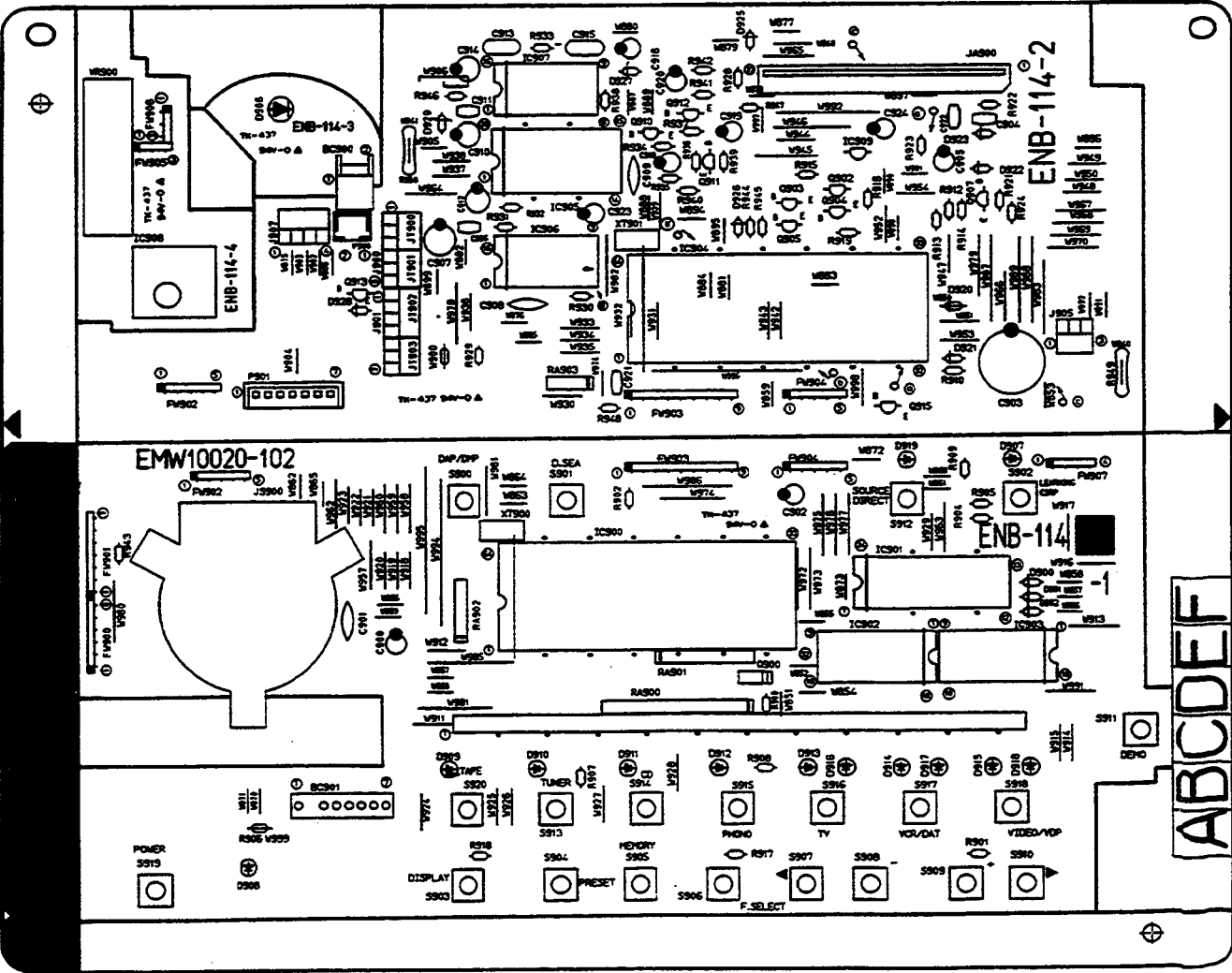
Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	K667	ENZ8101-016	INDUCTOR	
	K668	ENZ8101-016	INDUCTOR	
	K669	ENZ8101-016	INDUCTOR	
	K670	ENZ8101-016	INDUCTOR	
	K671	ENZ8101-016	INDUCTOR	
	K672	ENZ8101-016	INDUCTOR	
	K673	ENZ8101-016	INDUCTOR	
	K674	ENZ8101-016	INDUCTOR	
	L511	EQL4004-R22	INDUCTOR	
	L652	EQF0601-222	CERAMIC FILTER	
	L653	EQF0601-222	CERAMIC FILTER	
	L654	EQF0601-222	CERAMIC FILTER	
	L655	EQF0601-222	CERAMIC FILTER	
	L657	EQF0601-222	CERAMIC FILTER	
	L658	EQF0601-222	CERAMIC FILTER	
	P650	ENV7125-014R	CONNECTOR (34P2X)	
	P651	ENV7125-010R	CONNECTOR (38P2X)	
	CX650	ECX0180-000EF	RESONATOR	
	CX651	ECX0072-000EM	RESONATOR	

Δ : SAFETY PARTS

■ ENB-114 □ System & FL Control PC Board Ass'y

Note : ENB-114 □ varies according to the areas employed. See note (1) when placing an order.



Transistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q652	2SD2144S(VW)	SILICON ROHM	
	Q653	2SD2144S(VW)	SILICON ROHM	
	Q656	2SD2144S(VW)	SILICON ROHM	
	Q657	2SD2144S(VW)	SILICON ROHM	
	Q658	DTA114YS	SILICON ROHM	
	Q667	DTA114ES	SILICON ROHM	

Δ : SAFETY PARTS

I.C.s.

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC650	MN17581JNR	I.C. MATSUSHITA	
	IC651	LC83010N	I.C. SANYO	
	IC652	MB81464-12PSZ	I.C. FUJITSU	
	IC653	MB81464-12PSZ	I.C. FUJITSU	
	IC654	CS5339-KP	I.C. ASahi KASEI	
	IC655	SM5818A51	I.C. KANEMATSU	
	IC656	SM5807FS	I.C. KANEMATSU	
	IC657	PCM1700U	I.C. NIMONBARBURAUN	
	IC658	UPD63766S	I.C. NEC	
	IC659	LH535949	I.C. SHARP	
	IC660	BA15218M	I.C. ROHM	
	IC661	VC4580L	I.C. DAINICHI	
	IC663	VC4580L	I.C. DAINICHI	
	IC665	NJM79M05FA	I.C. DAINICHI	
	IC666	NJM78M05FD	I.C. DAINICHI	
	IC667	NJM78M05FD	I.C. DAINICHI	
	IC668	NJM78M05FD	I.C. DAINICHI	

Δ : SAFETY PARTS

Diodes

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D651	1SS133	SILICON ROHM	
	D661	MTZ4.7JB	ZENER ROHM	
	D662	MTZ4.7JB	ZENER ROHM	
	D663	MTZ4.7JB	ZENER ROHM	
	D664	MTZ4.7JB	ZENER ROHM	

Δ : SAFETY PARTS

Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C605	QCMB1EZ-223	0.022MF 25V CERAMIC	
	C606	QETB1EM-476	47MF 25V ELECTRO	
	C607	QETB1EM-476	47MF 25V ELECTRO	
	C608	QETB1EM-475	4.7MF 50V ELECTRO	
	C609	QETB1EM-475	4.7MF 50V ELECTRO	
	C610	QFV81HJ-104	0.1MF 50V T.FILM	
	C611	QFV81HJ-104	0.1MF 50V T.FILM	
	C612	QFV81HJ-104	0.1MF 50V T.FILM	
	C613	QFV81HJ-104	0.1MF 50V T.FILM	
	C614	QFV81HJ-104	0.1MF 50V T.FILM	
	C615	QFV81HJ-104	0.1MF 50V T.FILM	
	C616	QCGB1HK-102	1000PF 50V CERAMIC	
	C617	QETB1AM-227	220MF 10V ELECTRO	
	C618	QFV81HJ-104	0.1MF 50V T.FILM	
	C619	QCGB1HK-102	1000PF 50V CERAMIC	
	C620	QETB1AM-107	100MF 10V ELECTRO	
	C621	QCGB1HK-102	1000PF 50V CERAMIC	
	C622	QETB1AM-107	100MF 10V ELECTRO	
	C624	QCZ0205-155	1.5MF 25V CERAMIC	
	C625	QFV81HJ-104	0.1MF 50V T.FILM	
	C627	QETB1EM-106	10MF 25V ELECTRO	
	C628	QETB1EM-106	10MF 25V ELECTRO	
	C629	QETB1EM-106	10MF 25V ELECTRO	
	C631	EEZ5009-474	0.47MF ELECTRO	
	C632	EEZ5009-474	0.47MF ELECTRO	
	C633	QEHCIAM-107	100MF 10V ELECTRO	
	C634	QETB1EM-106	10MF 25V ELECTRO	
	C635	QETB1EM-106	10MF 25V ELECTRO	
	C638	QFV81HJ-104	0.1MF 50V T.FILM	
	C639	QCSB1HJ-680	68PF 50V CERAMIC	
	C646	QETB1AM-107	100MF 10V ELECTRO	
	C647	QCMB1EZ-223	0.022MF 25V CERAMIC	
	C648	QFV81HJ-104	0.1MF 50V T.FILM	
	C649	QCZ0205-155	1.5MF 25V CERAMIC	
	C652	QFN81HJ-103	0.01MF 50V MYLAR	
	C653	QFN81HJ-103	0.01MF 50V MYLAR	
	C654	QFN81HJ-222	2200PF 50V MYLAR	
	C655	QFN81HJ-222	2200PF 50V MYLAR	
	C656	QFN81HJ-223	0.022MF 50V MYLAR	
	C657	QFN81HJ-223	0.022MF 50V MYLAR	
	C658	QETB1EM-226	22MF 50V ELECTRO	
	C659	QETB1EM-226	22MF 50V ELECTRO	
	C660	QFN81HJ-103	0.01MF 50V MYLAR	
	C661	QFN81HJ-103	0.01MF 50V MYLAR	
	C662	QFN81HJ-222	2200PF 50V MYLAR	

Δ : SAFETY PARTS

Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C663	QFN81HJ-222	2200PF 50V MYLAR	
	C664	QETB1EM-226	22MF 25V ELECTRO	
	C665	QETB1EM-226	22MF 25V ELECTRO	
	C666	QFN81HJ-223	0.022MF 50V MYLAR	
	C667	QFN81HJ-223	0.022MF 50V MYLAR	
	C668	QFN81HJ-103	0.01MF 50V MYLAR	
	C669	QFN81HJ-103	0.01MF 50V MYLAR	
	C673	QCMB1EZ-223	0.022MF 25V CERAMIC	
	C674	QCMB1EZ-223	0.022MF 25V CERAMIC	
	C675	QCMB1EZ-223	0.022MF 25V CERAMIC	
	C676	QCMB1EZ-223	0.022MF 25V CERAMIC	
	C678	QFV81HJ-104	0.1MF 50V T.FILM	
	C679	QEHCIAM-107	100MF 10V ELECTRO	
	C680	QCMB1EZ-223	0.022MF 25V CERAMIC	
	C681	QFV81HJ-104	0.1MF 50V T.FILM	
	C684	QETB1EM-106	10MF 25V ELECTRO	
	C685	QCZ0205-155	1.5MF 25V CERAMIC	
	C686	QCGB1HK-102	1000PF 50V CERAMIC	
	C687	QETB1AM-107	100MF 10V ELECTRO	
	C688	QCT30CH-180	18PF 50V CERAMIC	
	C689	QCT30CH-180	18PF 50V CERAMIC	
	C690	QCGB1HK-102	1000PF 50V CERAMIC	
	C691	QETB1AM-107	100MF 10V ELECTRO	
	C692	QCZ0205-155	1.5MF 25V CERAMIC	
	C694	QCZ0205-155	1.5MF 25V CERAMIC	
	C695	QCZ0205-155	1.5MF 25V CERAMIC	
	C696	QFV81HJ-104	0.1MF 50V T.FILM	
	C697	QFV81HJ-104	0.1MF 50V T.FILM	
	C698	QFV81HJ-104	0.1MF 50V T.FILM	
	C699	QFV81HJ-104	0.1MF 50V T.FILM	

Δ : SAFETY PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R617	QRD167J-621	620 1/6W CARBON	
	R618	QRD167J-621	620 1/6W CARBON	
	R619	QRD167J-821	820 1/6W CARBON	
	R620	QRD167J-821	820 1/6W CARBON	
	R621	QRD167J-183	18K 1/6W CARBON	
	R622	QRD167J-183	18K 1/6W CARBON	
	R623	QRD167J-821	820 1/6W CARBON	
	R624	QRD167J-821	820 1/6W CARBON	
	R630	QRD167J-184	180K 1/6W CARBON	
	R631	QRD167J-184	180K 1/6W CARBON	
	R632	QRD167J-102	1K 1/6W CARBON	
	R633	QRD167J-102	1K 1/6W CARBON	
	R634	QRD167J-102	1K 1/6W CARBON	
	R635	QRD167J-102	1K 1/6W CARBON	
	R636	QVPA601-104A	100K VARIABLE	
	R637	QVPA601-104A	100K VARIABLE	
	R647	QRD167J-103	10K 1/6W CARBON	
	R654	QRD167J-821	820 1/6W CARBON	
	R655	QRD167J-821	820 1/6W CARBON	
	R656	QRD167J-821	820 1/6W CARBON	
	R657	QRD167J-821	820 1/6W CARBON	
	R658	QRD167J-273	27K 1/6W CARBON	
	R659	QRD167J-273	27K 1/6W CARBON	
	R660	QRD167J-271	270 1/6W CARBON	
	R661	QRD167J-271	270 1/6W CARBON	
	R662	QRD167J-271	270 1/6W CARBON	
	R663	QRD167J-271	270 1/6W CARBON	
	R666	QRD167J-103	10K 1/6W CARBON	
	R667	QRD167J-103	10K 1/6W CARBON	
	R668	QRD167J-104	100K 1/6W CARBON	
	R669	QRD167J-104	100K 1/6W CARBON	
	R670	QRD167J-821	820 1/6W CARBON	
	R671	QRD167J-821	820 1/6W CARBON	
	R672	QRD167J-821	820 1/6W CARBON	
	R673	QRD167J-821	820 1/6W CARBON	
	R674	QRD167J-273	27K 1/6W CARBON	
	R675	QRD167J-273	27K 1/6W CARBON	
	R676	QRD167J-391	390 1/6W CARBON	
	R677	QRD167J-391	390 1/6W CARBON	
	R678	QRD167J-181	180 1/6W CARBON	
	R679	QRD167J-181	180 1/6W CARBON	
	R682	QRD167J-103	10K 1/6W CARBON	
	R683	QRD167J-103	10K 1/6W CARBON	
	R684	QRD167J-221	220 1/6W CARBON	
	R685	QRD167J-221	220 1/6W CARBON	
	R686	QRD167J-475	47K 1/6W CARBON	
	R687	QRD167J-473	47K 1/6W CARBON	
	R688	QRD167J-473	47K 1/6W CARBON	
	R689	QRD167J-473	47K 1/6W CARBON	
	R690	QRD167J-273	27K 1/6W CARBON	
	R691	QRD167J-273	27K 1/6W CARBON	
	R692	QRD167J-221	220 1/6W CARBON	
	R693	QRD167J-221	220 1/6W CARBON	
	R695	QRD167J-103	10K 1/6W CARBON	
	R696	QRD167J-100	10 1/6W CARBON	

Δ : SAFETY PARTS

Note (1)

PC Board Ass'y	Designated Areas
ENB-114 B	the U.S.A., Canada
ENB-114 C	Australia, Universal Type Continental Europe
ENB-114 D	Germany, Italy
ENB-114 E	the U.K.

Transistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q900	DTC114TFF	SILICON ROHM	
	Q902	DTC144TS	SILICON ROHM	
	Q903	DTC144ES	SILICON ROHM	
	Q904	DTC144ES	SILICON ROHM	
	Q905	DTC144ES	SILICON ROHM	
	Q907	DTC144ES	SILICON ROHM	
	Q910	2SC1685(R,S)	SILICON MATSUSHITA	
	Q911	2SC1685(R,S)	SILICON MATSUSHITA	
	Q912	2SC1685(R,S)	SILICON MATSUSHITA	
	Q913	DTC144ES	SILICON ROHM	
	Q915	DTC144TS	SILICON ROHM	

Δ : SAFETY PARTS

I.C.s.

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC900	MN171202JPB	I.C. MATSUSHITA	
	IC901	TC74HC154AP	I.C. TOSHIBA	
	IC902	MSL915ARS	I.C. NIMON DENSO	
	IC903	MSL915ARS	I.C. NIMON DENSO	
	IC904	MN171202JPA	I.C. MATSUSHITA	
	IC905	TC9164N	I.C. TOSHIBA	
	IC906	UPD7001C	I.C. NEC	
	IC907	XR-1091DCP	I.C. EXAR JAPAN	
	IC908	GP1U501X	I.C. SHARP	
	IC909	MN1281(P,Q)	I.C. MATSUSHITA	

Δ : SAFETY PARTS

Diodes

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D900	1SS133	SILICON ROHM	
	D901	1SS133	SILICON ROHM	
	D902	1SS133	SILICON ROHM	
	D906	LN282RPX	L.E.D.	
	D907	SLH-34VC3F	L.E.D. ROHM	
	D908	SLH-34VC3F	L.E.D. ROHM	B
	D908	SLH-34VC3F	L.E.D. ROHM	C
	D908	SLH-34VC3F	L.E.D. ROHM	D
	D908	SLA-580LT3F	L.E.D. ROHM	E
	D909	SLH-34VC3F	L.E.D. ROHM	
	D910	SLH-34VC3F	L.E.D. ROHM	
	D911	SLH-34VC3F	L.E.D. ROHM	
	D912	SLH-34VC3F	L.E.D. ROHM	
	D913	SLH-34VC3F	L.E.D. ROHM	
	D914	SLH-34VC3F	L.E.D. ROHM	
	D915	SLH-34VC3F	L.E.D. ROHM	
	D916	SLH-34DC3F	L.E.D. ROHM	
	D917	SLH-34DC3F	L.E.D. ROHM	
	D918	SLH-34DC3F	L.E.D. ROHM	
	D919	SLH-34VC3F	L.E.D. ROHM	
	D920	1SS133	SILICON ROHM	
	D921	1SS133	SILICON ROHM	
	D922	1SS133	SILICON ROHM	
	D923	1SS133	SILICON ROHM	
	D925	1SS133	SILICON ROHM	
	D926	1SS133	SILICON ROHM	
	D927	MTZ5.1JC	ZENER ROHM	
	D928	1SS133	SILICON ROHM	
	D929	MTZ5.1JB	ZENER ROHM	

Δ : SAFETY PARTS

Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C900	QERS1HM-1056	1MF 50V ELECTRO	
	C901	QCF21HP-223	0.022MF 50V CERAMIC	
	C902	QETB0JM-227	220MF 6.3V ELECTRO	
	C903	EEZ0502-479	47000MF 5.5V ELECTRO	
	C904	QCB81HK-471	470PF 50V CERAMIC	
	C905	QEK51HM-4746	0.47MF 50V ELECTRO	
	C906	QCV81CM-103	0.01MF 16V CERAMIC	
	C907	QET81CM-107	100MF 16V ELECTRO	
	C908	QCS21HJ-470	47PF 50V CERAMIC	
	C909	QCS21HJ-561	560PF 50V CERAMIC	
	C910	QET81CM-476	47MF 16V ELECTRO	
	C911	QCV81CM-103	0.01MF 16V CERAMIC	
	C912	QET81CM-476	47MF 16V ELECTRO	
	C913	QFV81HJ-104	0.1MF 50V T.FILM	
	C914	QET81CM-476	47MF 16V ELECTRO	
	C915	QFN81HJ-102	1000PF 50V NYLAR	
	C916	QEK51HM-4746	0.47MF 50V ELECTRO	
	C918	QEK51HM-4746	0.47MF 50V ELECTRO	
	C919	QEK51CM-1066	10MF 16V ELECTRO	
	C920	QEK51HM-1056	1MF 50V ELECTRO	
	C921	QCH81E2-223	0.022MF 25V CERAMIC	
	C922	QCV81CM-103	0.01MF 16V CERAMIC	
	C923	QEK51HM-1056	1MF 50V ELECTRO	
	C924	QEK51CM-1066	10MF 16V ELECTRO	

Δ : SAFETY PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R900	QRD167J-473	47K 1/6W CARBON	
	R901	QRD167J-103	10K 1/6W CARBON	
	R902	QRD167J-103	10K 1/6W CARBON	
	R904	QRD167J-821	820 1/6W CARBON	
	R905	QRD167J-331	330 1/6W CARBON	
	R906	QRD167J-331	330 1/6W CARBON	B
	R906	QRD167J-331	330 1/6W CARBON	C
	R906	QRD167J-331	330 1/6W CARBON	D
	R906	QRD167J-471	470 1/6W CARBON	E
	R907	QRD167J-331	330 1/6W CARBON	
	R908	QRD167J-331	330 1/6W CARBON	
	R909	QRD167J-331	330 1/6W CARBON	
	R910	QRD167J-470	47 1/6W CARBON	
	R912	QRD167J-103	10K 1/6W CARBON	
	R913	QRD167J-103	10K 1/6W CARBON	
	R914	QRD167J-103	10K 1/6W CARBON	
	R915	QRD167J-221	220 1/6W CARBON	
	R916	QRD167J-103	10K 1/6W CARBON	
	R917	QRD167J-103	10K 1/6W CARBON	
	R918	QRD167J-103	10K 1/6W CARBON	
	R919	QRD167J-103	10K 1/6W CARBON	
	R921	QRD167J-221	220 1/6W CARBON	
	R922	QRD167J-473	47K 1/6W CARBON	
	R923	QRD167J-103	10K 1/6W CARBON	
	R924	QRD167J-223	22K 1/6W CARBON	
	R929	QRD167J-223	22K 1/6W CARBON	
	R930	QRD167J-273	27K 1/6W CARBON	
	R931	QRD167J-223	22K 1/6W CARBON	
	R932	QRD167J-223	22K 1/6W CARBON	
	R933	QRD167J-152	1.5K 1/6W CARBON	
	R934	QRD167J-104	100K 1/6W CARBON	
	R935	QRD167J-473	47K 1/6W CARBON	
	R936	QRD167J-103	10K 1/6W CARBON	
	R937	QRD167J-273	27K 1/6W CARBON	
	R938	QRD167J-562	5.6K 1/6W CARBON	
	R939	QRD167J-473	47K 1/6W CARBON	
	R940	QRD167J-153	15K 1/6W CARBON	
	R941	QRD167J-105	1M 1/6W CARBON	
	R942	QRD167J-102	1K 1/6W CARBON	
	R943	QRD167J-103	10K 1/6W CARBON	
	R944	QRD167J-103	10K 1/6W CARBON	
	R945	QRD167J-103	10K 1/6W CARBON	
	R946	QRD167J-241	240 1/6W CARBON	
	R947	QRD167J-222	2.2K 1/6W CARBON	
	R948	QRD167J-121	120 1/6W CARBON	
Δ	R949	QRD14CJ-2R7S	2.7 1/4W UNF. CARBON	B
Δ	R949	QRZ0077-4R7	4.7 1/4W FUSIBLE	C
Δ	R949	QRZ0077-4R7	4.7 1/4W FUSIBLE	D
Δ	R949	QRZ0077-4R7	4.7 1/4W FUSIBLE	E
	RA902	QRB069J-103	10K 1/10W R.NETWORK	
	RA903	QRB049J-103	10K 1/10W R.NETWORK	
	VR900	QVXA01V-E15B	100K VARIABLE	

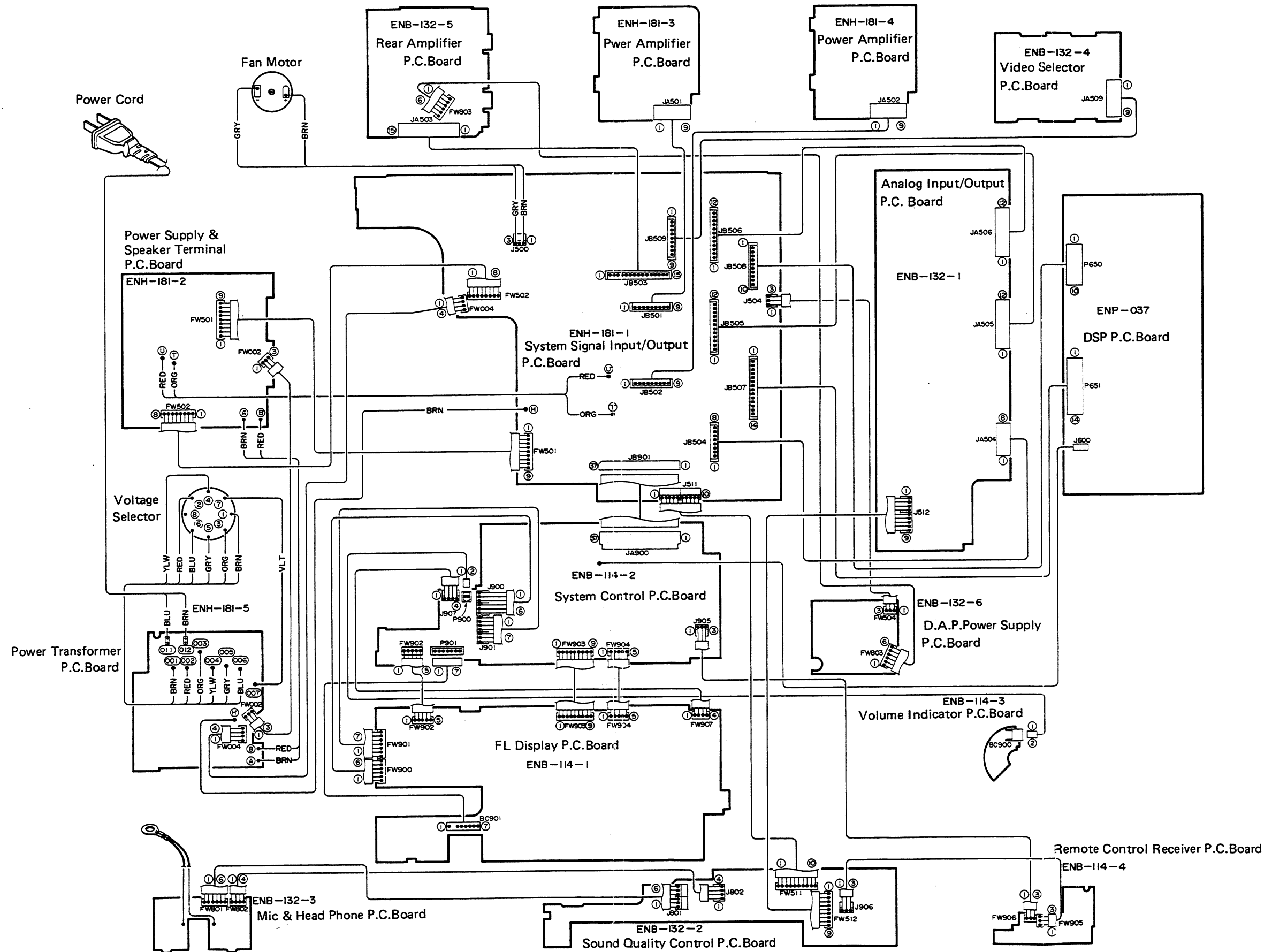
Δ : SAFETY PARTS

Others

ITEM	PART NUMBER	DESCRIPTION	AREA
	EMW10020-102	CIRCUIT BOARD	
	E3400-431	SPACER	
	EWS243-039	SOCKET WIRE	C
	EWS243-039	SOCKET WIRE	D
	EWS243-039	SOCKET WIRE	E
J905	EMV7122-103	CONNECTOR (SPIN)	
J907	EMV7122-004	CONNECTOR (OPEN)	
P900	EMV5103-002A	PLUG ASSY (SPIN)	
P901	EMV5133-007	PLUG ASSY (7PIN)	
S900	ESP0001-018	TACT SWITCH (DAP)	
S901	ESP0001-018	TACT SWITCH (SEA)	
S902	ESP0001-018	TACT SWITCH (CSEP)	
S903	ESP0001-018	TACT SWITCH (DISPLAY)	
S904	ESP0001-018	TACT SWITCH (PRESET)	
S905	ESP0001-018	TACT SWITCH (MEMORY)	
S906	ESP0001-018	TACT SWITCH (P.SELECT)	
S907	ESP0001-018	TACT SWITCH (←)	
S908	ESP0001-018	TACT SWITCH (DOWN)	
S909	ESP0001-018	TACT SWITCH (UP)	
S910	ESP0001-018	TACT SWITCH (→)	
S911	ESP0001-018	TACT SWITCH (ZERO)	
S912	ESP0001-018	TACT SWITCH (S.DIRECT)	
S913	ESP0001-018	TACT SWITCH (TUNER)	
S914	ESP0001-018	TACT SWITCH (CD)	
S915	ESP0001-018	TACT SWITCH (PHONE)	
S916	ESP0001-018	TACT SWITCH (TV)	
S917	ESP0001-018	TACT SWITCH (VCR/DAT)	
S918	ESP0001-018	TACT SWITCH (VIDEO/VDP)	
S919	ESP0001-018	TACT SWITCH (POWER)	
S920	ESP0001-018	TACT SWITCH (TAPE)	
BC900	EMV5103-002B	PLUG ASSY (SPIN)	
BC901	EWS247-008	SOCKET WIRE (7PIN)	
FL900	ELU0001-123	FL TUBE	
FS900	E304305-007	FELT SPACER	
FW900	EWR348-13LST	FLAT WIRE (SPIN)	
FW901	EWR378-13LST	FLAT WIRE (SPIN)	
FW902	EWR358-08SST	FLAT WIRE (SPIN)	
FW903	EWR398-08SST	FLAT WIRE (SPIN)	
FW904	EWR358-08SST	FLAT WIRE (SPIN)	
FW905	EWR338-13LST	FLAT WIRE (SPIN)	
FW906	EWR338-13LST	FLAT WIRE (SPIN)	
FW907	EWR348-25LST	FLAT WIRE (SPIN)	
JA900	EMV7123-037	CONNECTOR (7PIN)	
JS900	ENZ2401-001	WIRE WOUND VARI. RESISTOR	
JT900	EMV7122-103	CONNECTOR (SPIN)	
JT901	EMV7122-103	CONNECTOR (SPIN)	
JT902	EMV7122-004	CONNECTOR (OPEN)	
JT903	EMV7122-103	CONNECTOR (SPIN)	
XT900	2CX0260-000EM	RESONATOR	
XT901	2CX0260-000EM	RESONATOR	

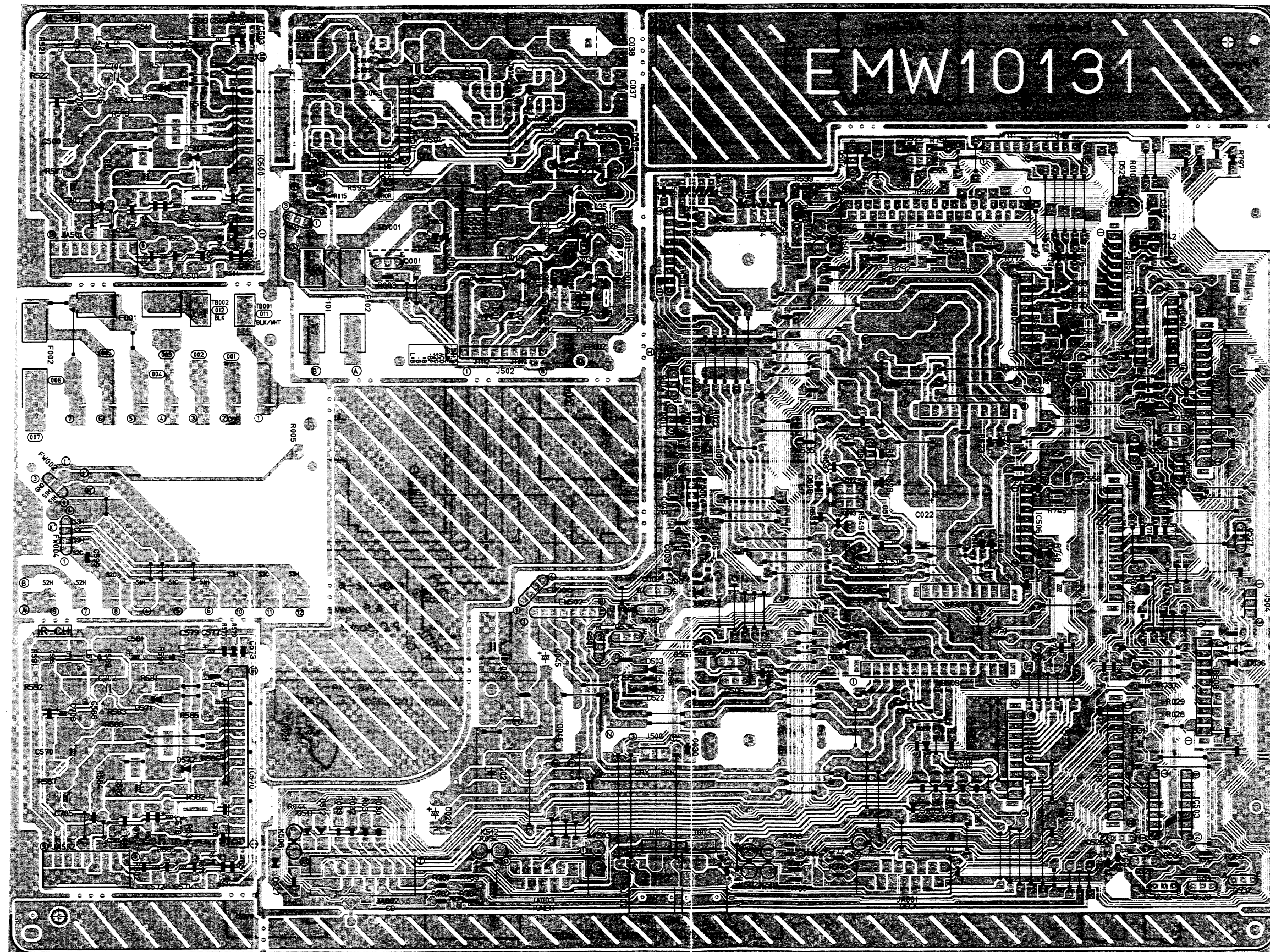
△ SAFETY PARTS

Connection Diagram



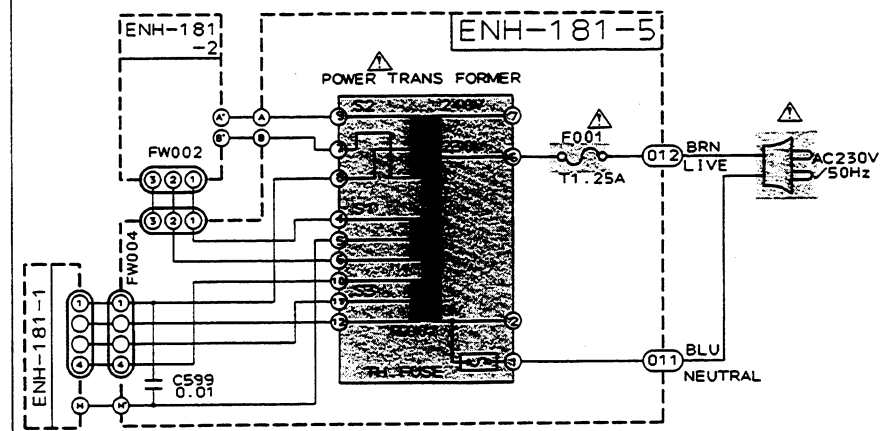
Printed Circuit Boards

■ Front Amplifier & Power Primary P.C. Board (ENH-181)

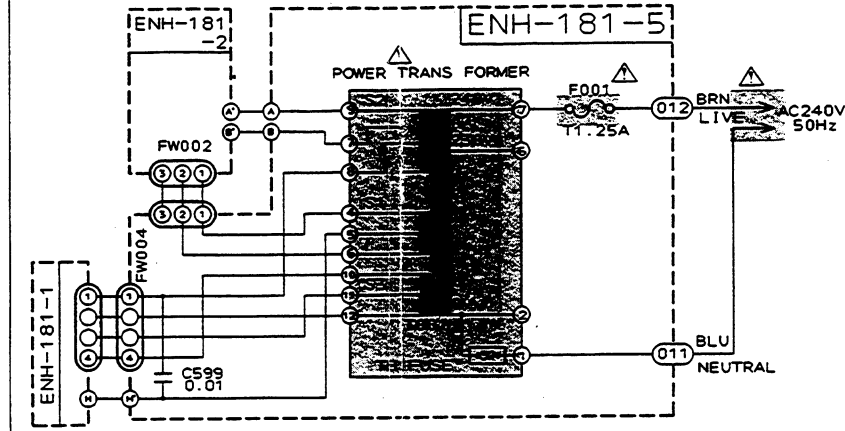


5. Power Primary Section

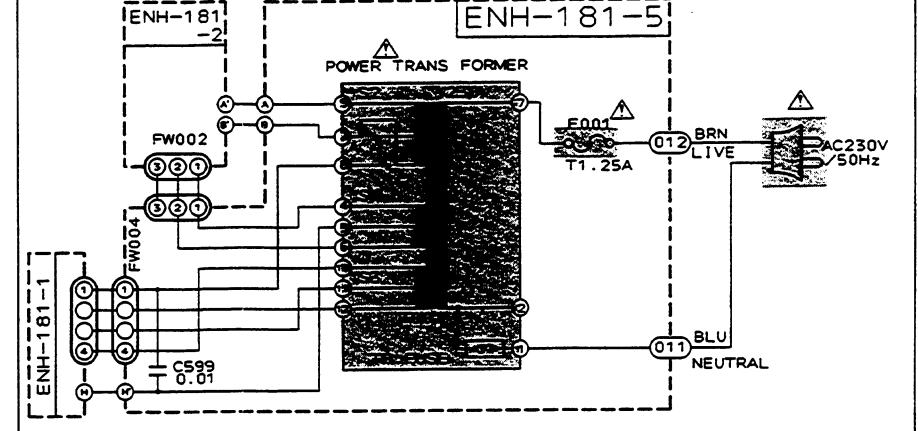
(E, EF) FOR CONTINENTAL EUROPE



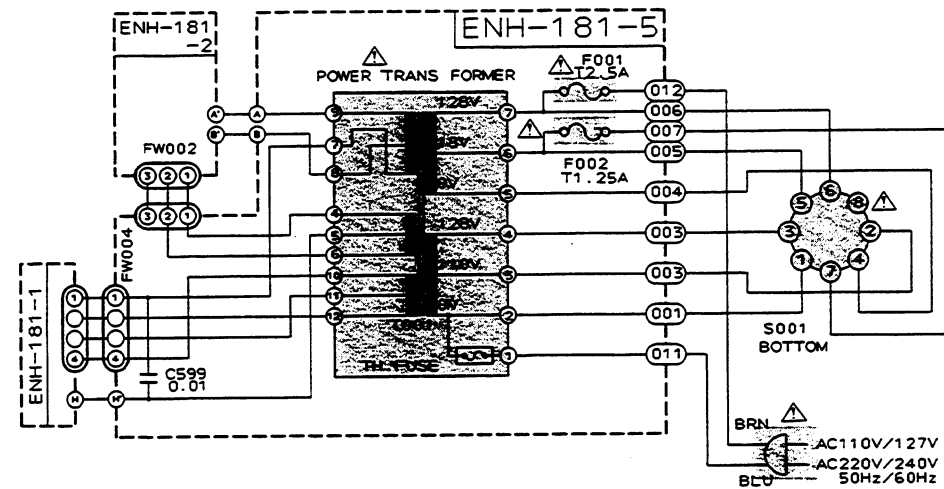
(BS, A) BS FOR U.K. A FOR AUSTRALIA



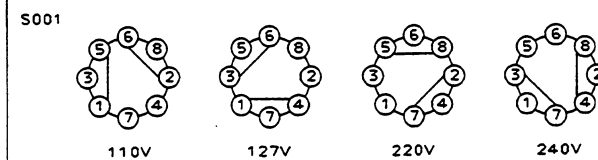
(G, GI) G FOR GERMANY GI FOR ITALY



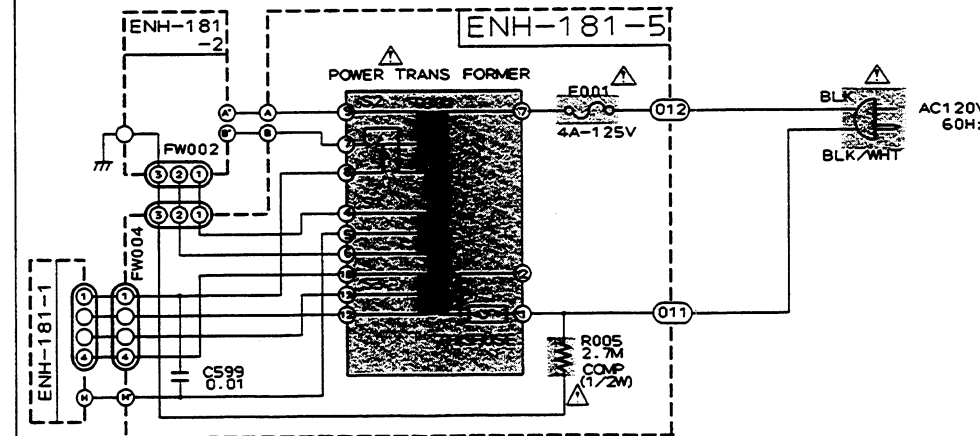
(U) FOR OTHER COUNTRIES



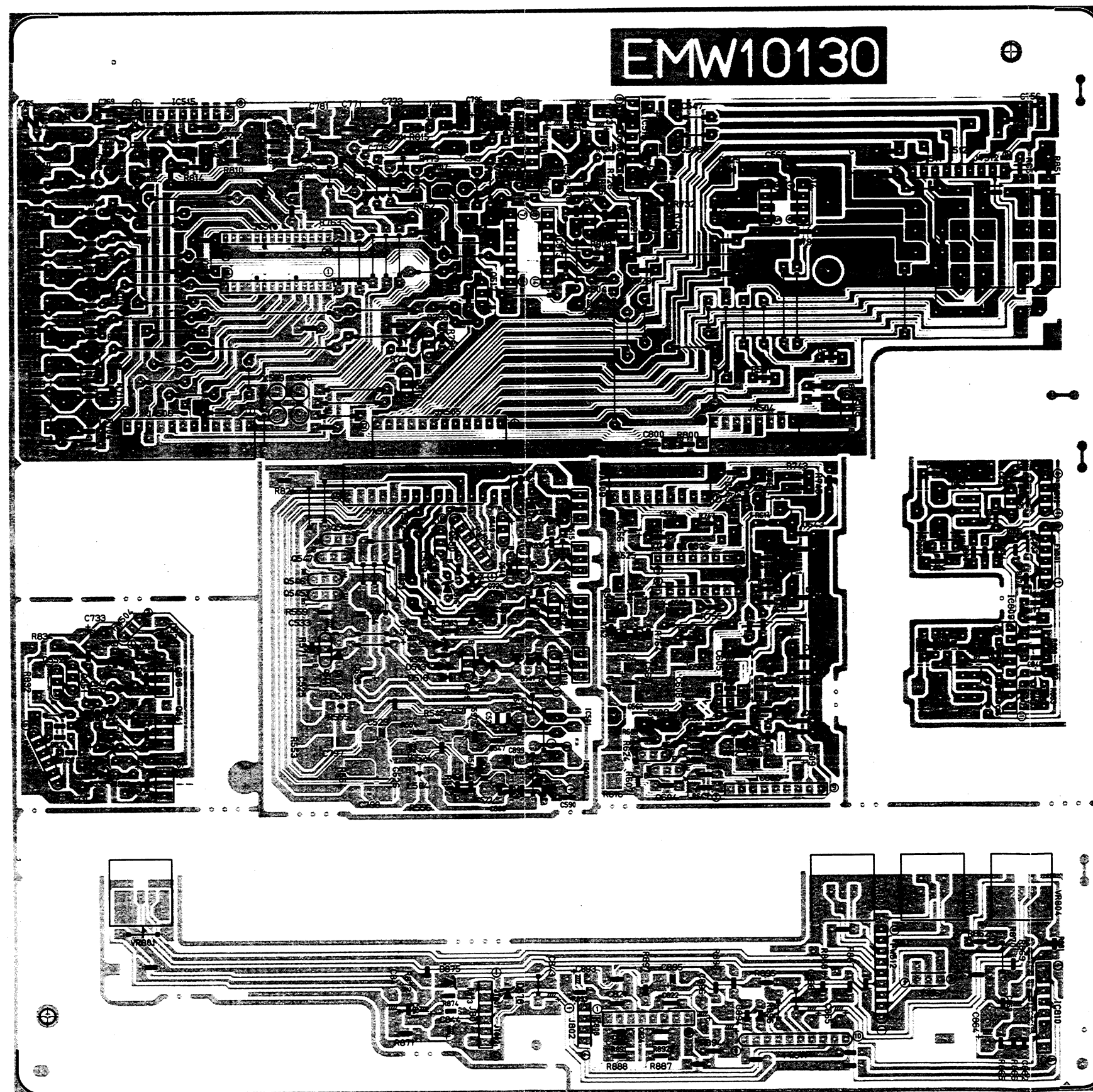
VOLTAGE SELECTOR CONNECTION



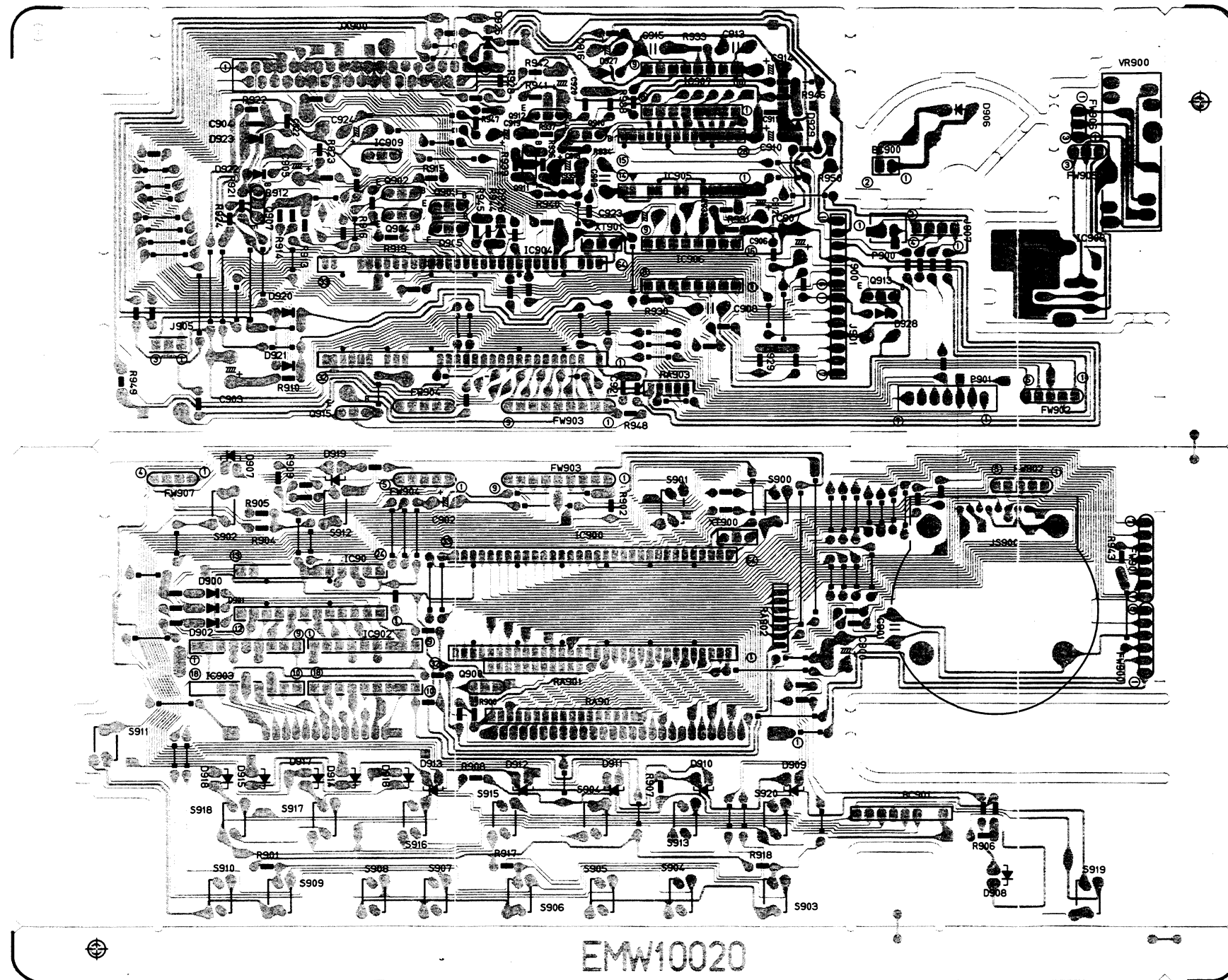
(J, C) J FOR U.S.A. C FOR CANADA



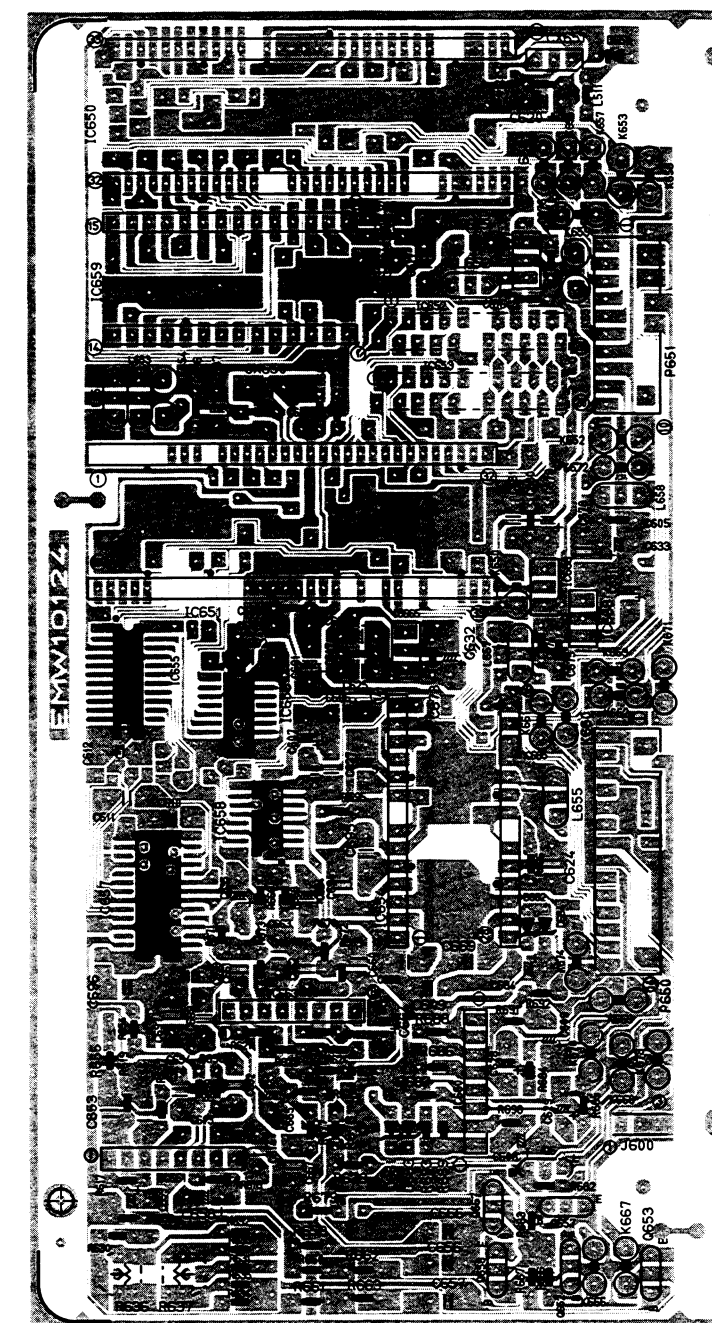
■ Rear Amplifier & Source Select P.C.Board (ENB-132)



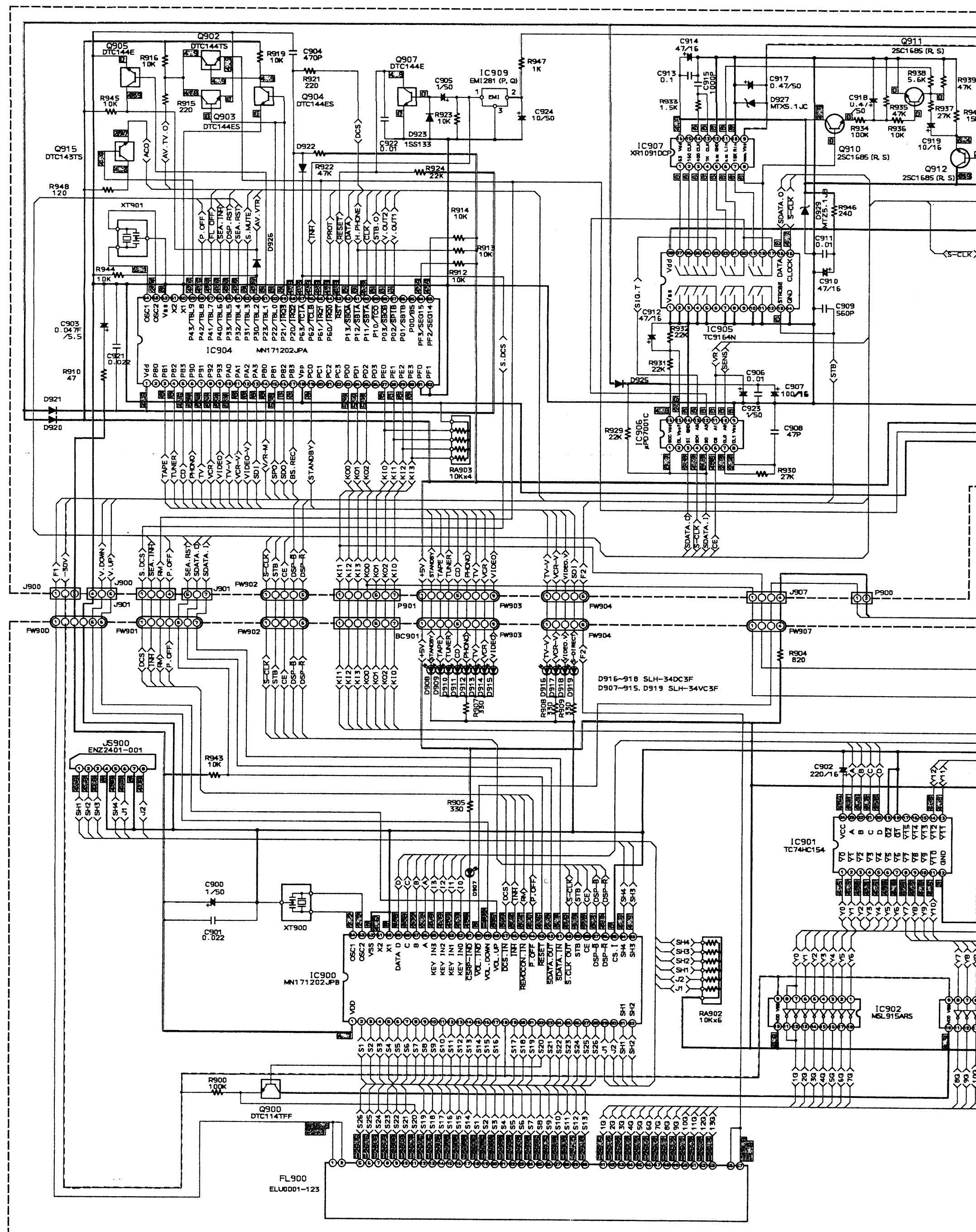
■ System & FI Control P.C.Board (ENB-114)

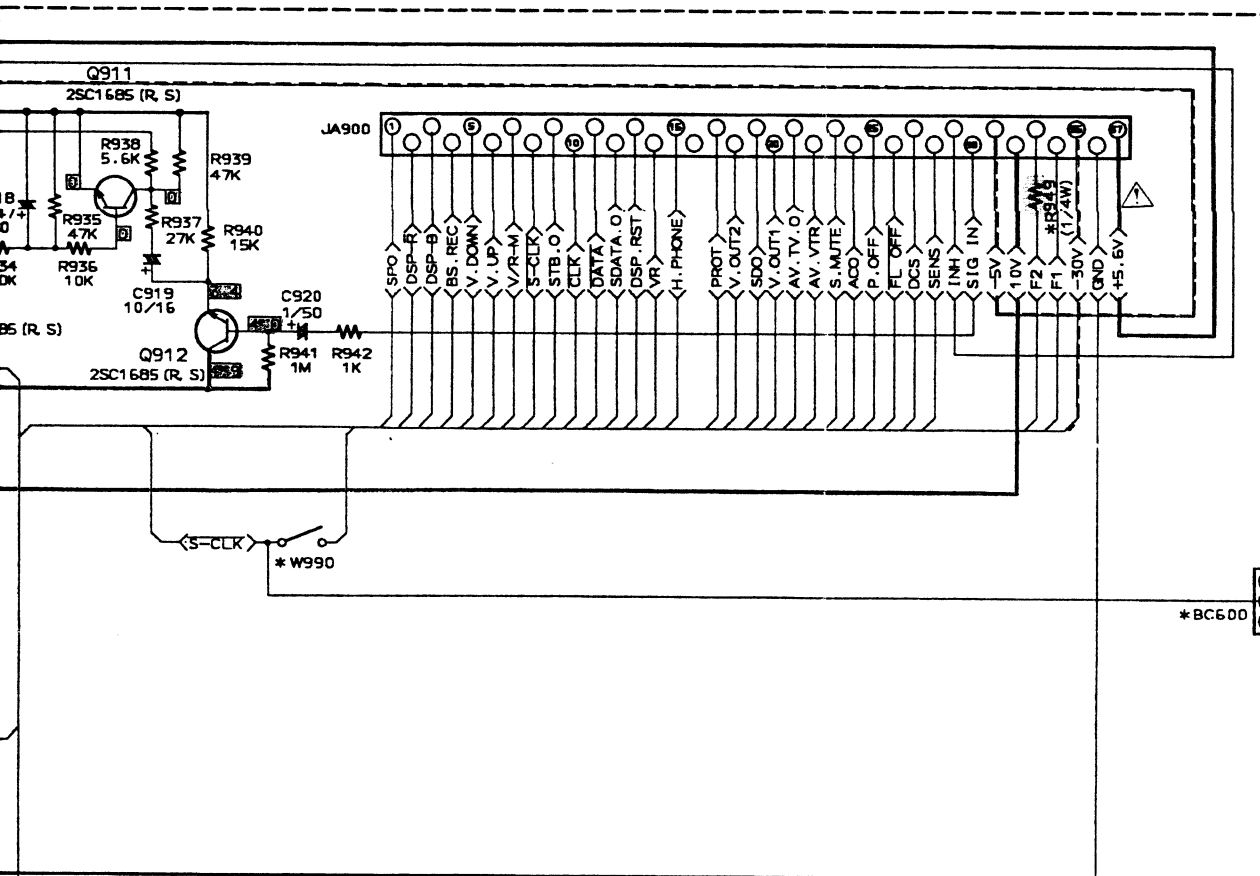


■ DAP P.C.Board (ENP-037)



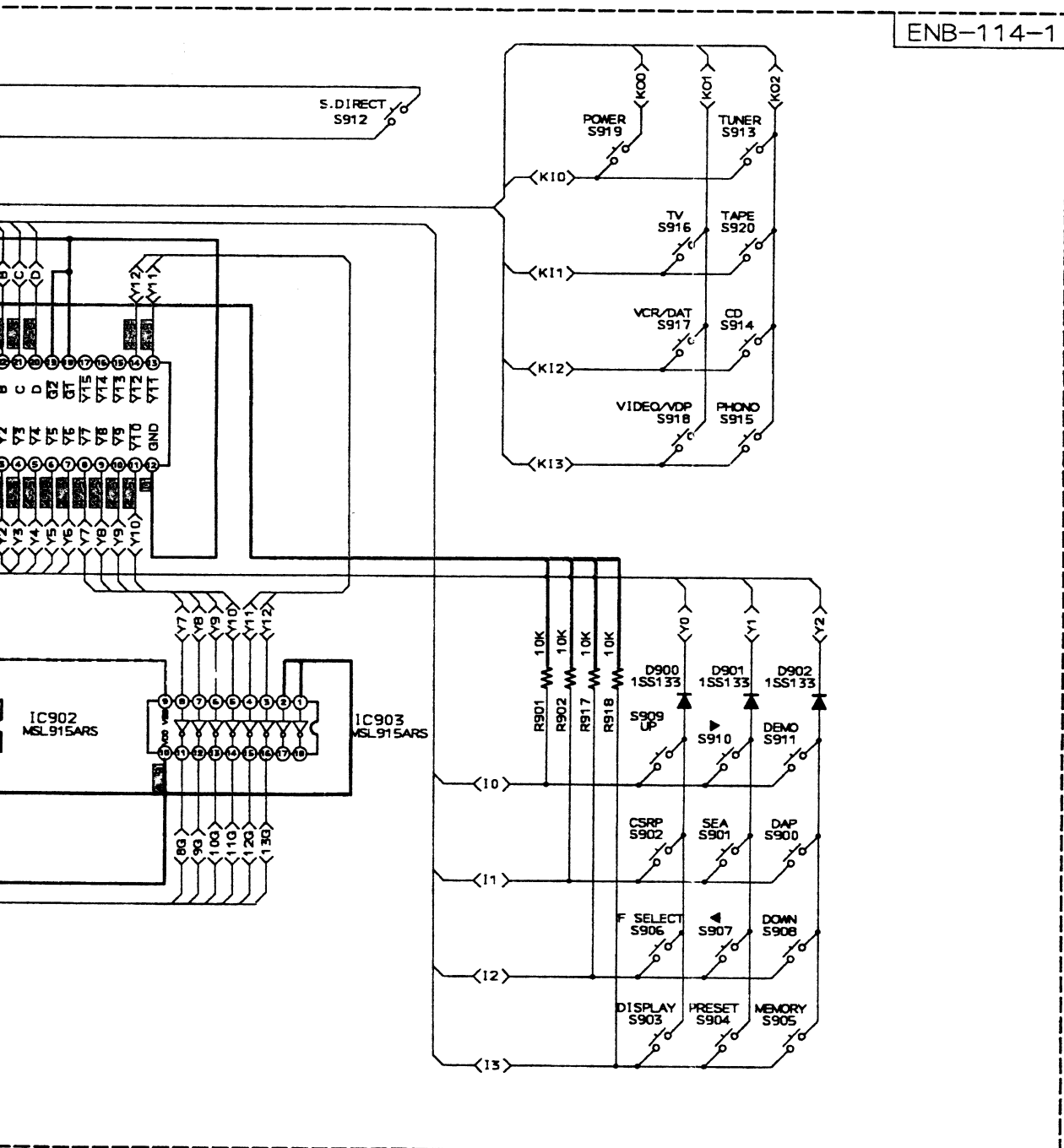
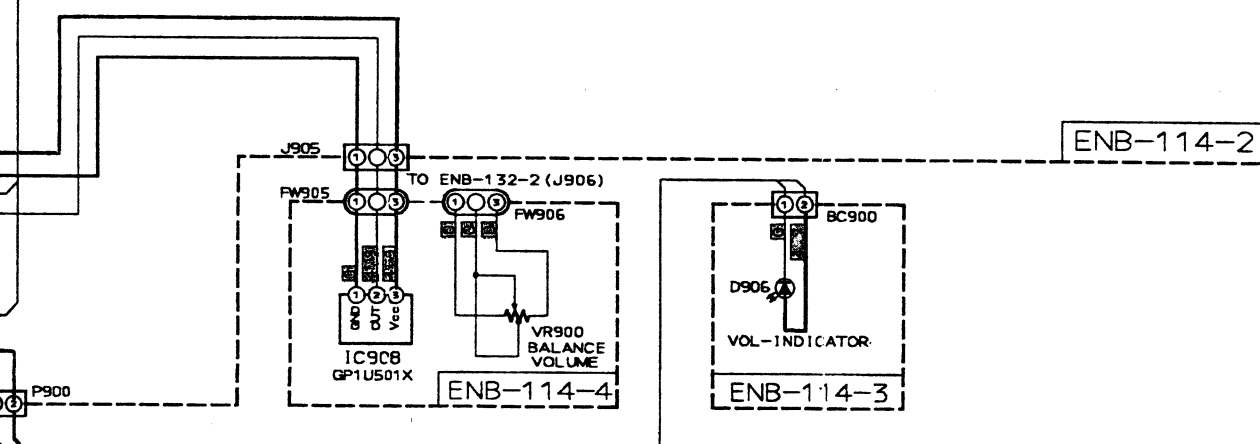
4. System Control & FL driver Section



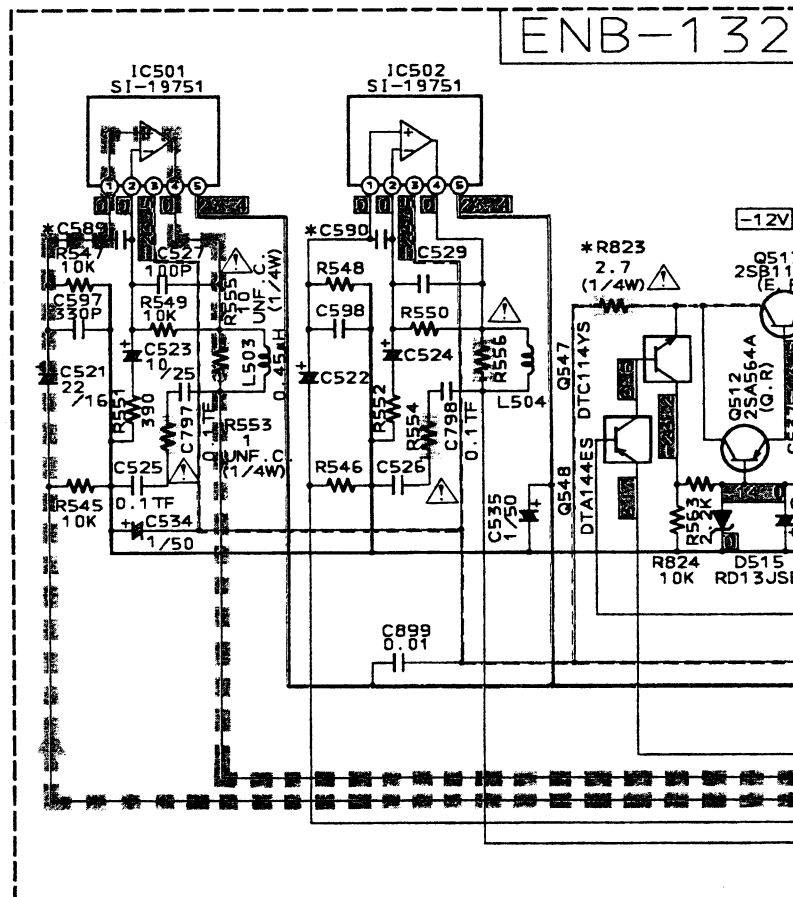
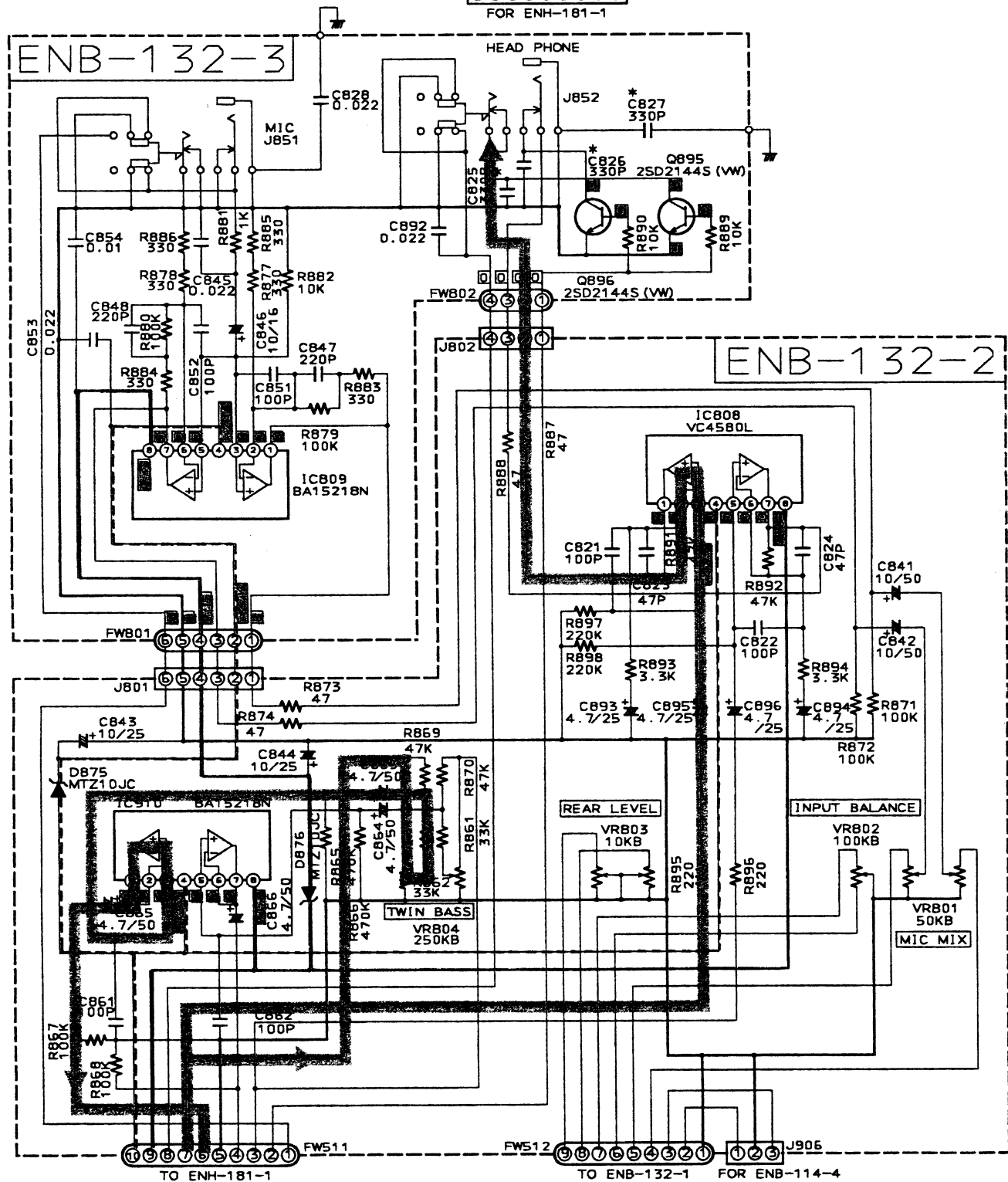
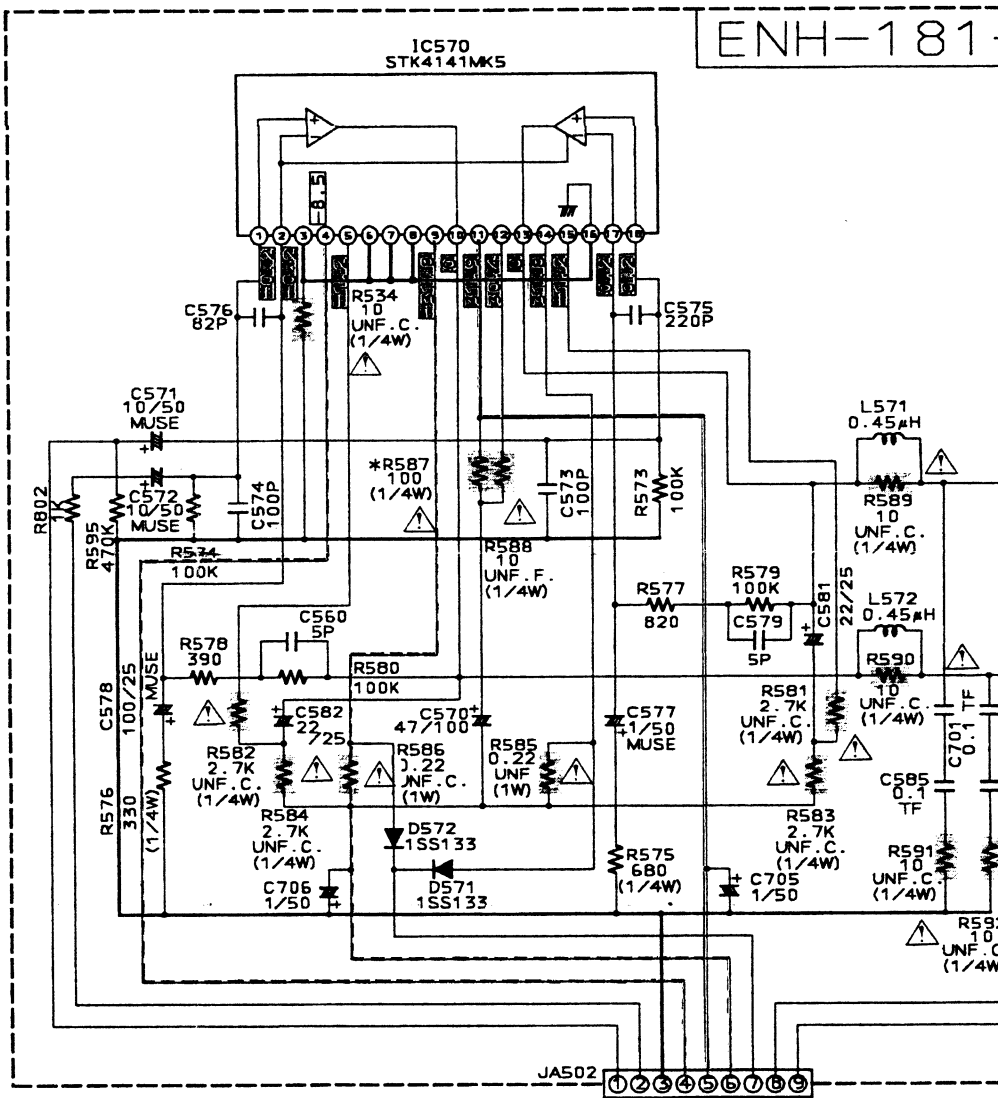
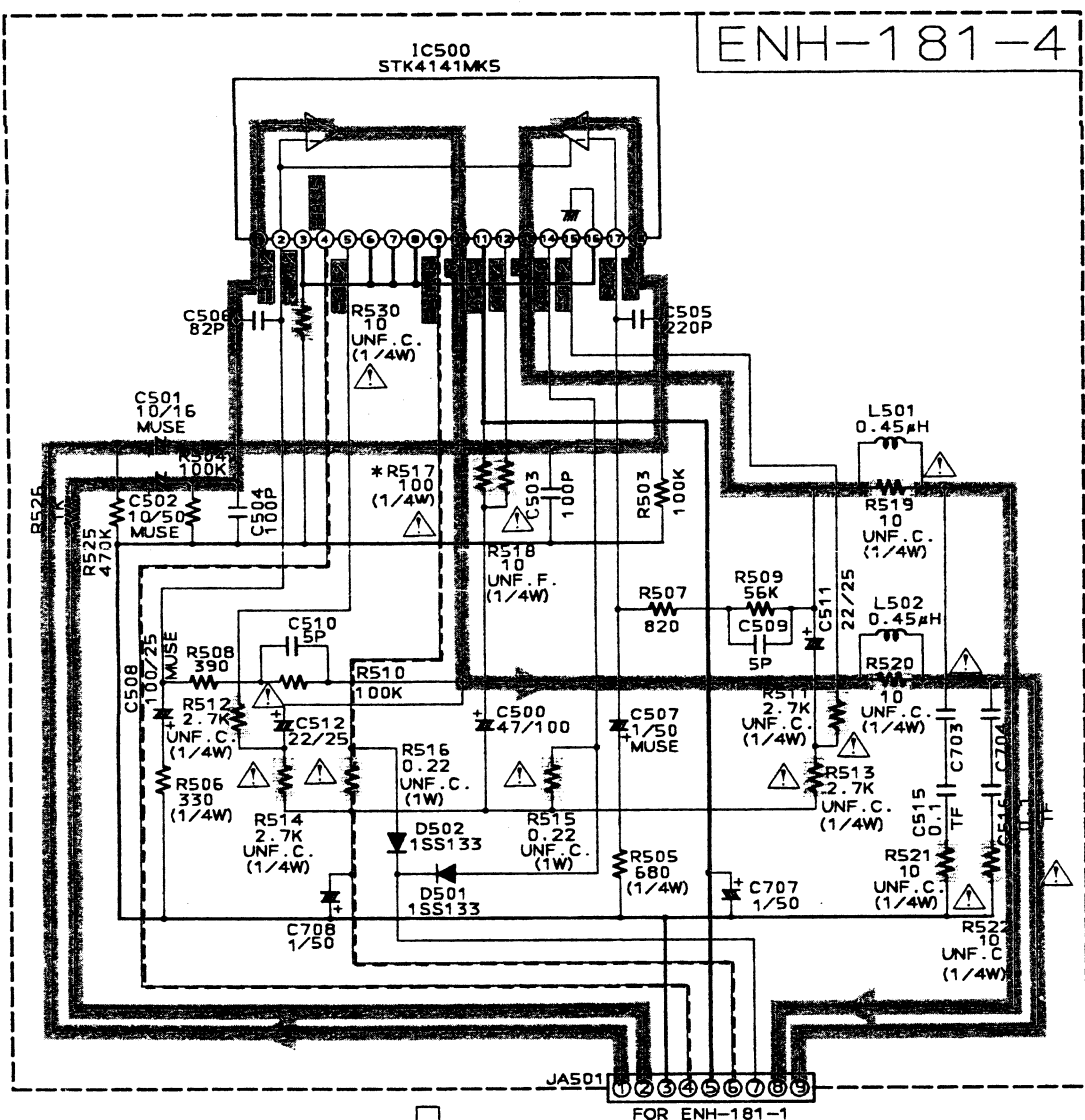


* MARK

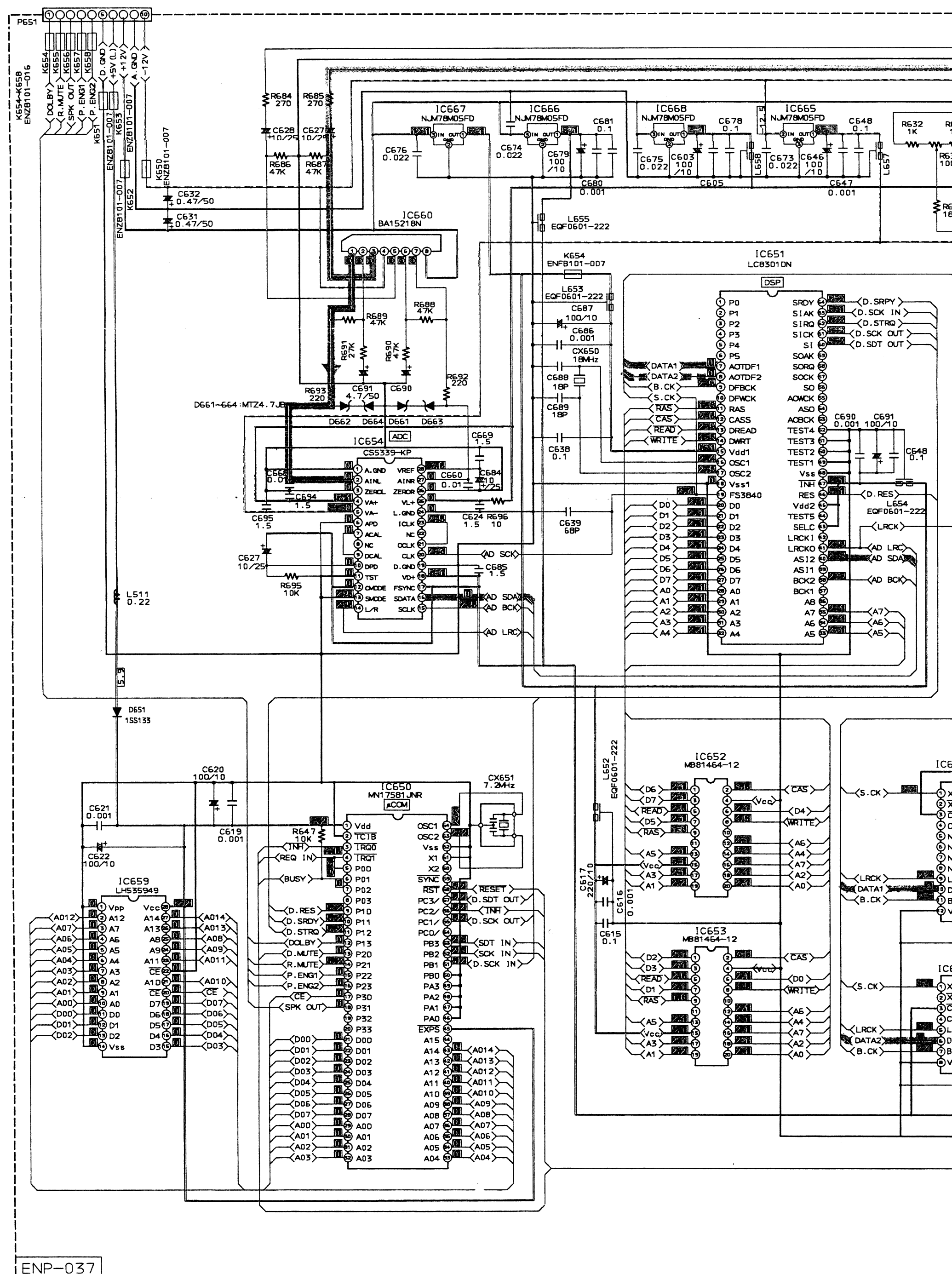
	J. C	E. EF A. BS	G. G1	U
R949	2.7 UNF. C.	4.7 UNF. F.	4.7 UNF. F.	4.7 UNF. F.
BC600	NONE	USED	USED	USED
W990	USED	NONE	NONE	NONE



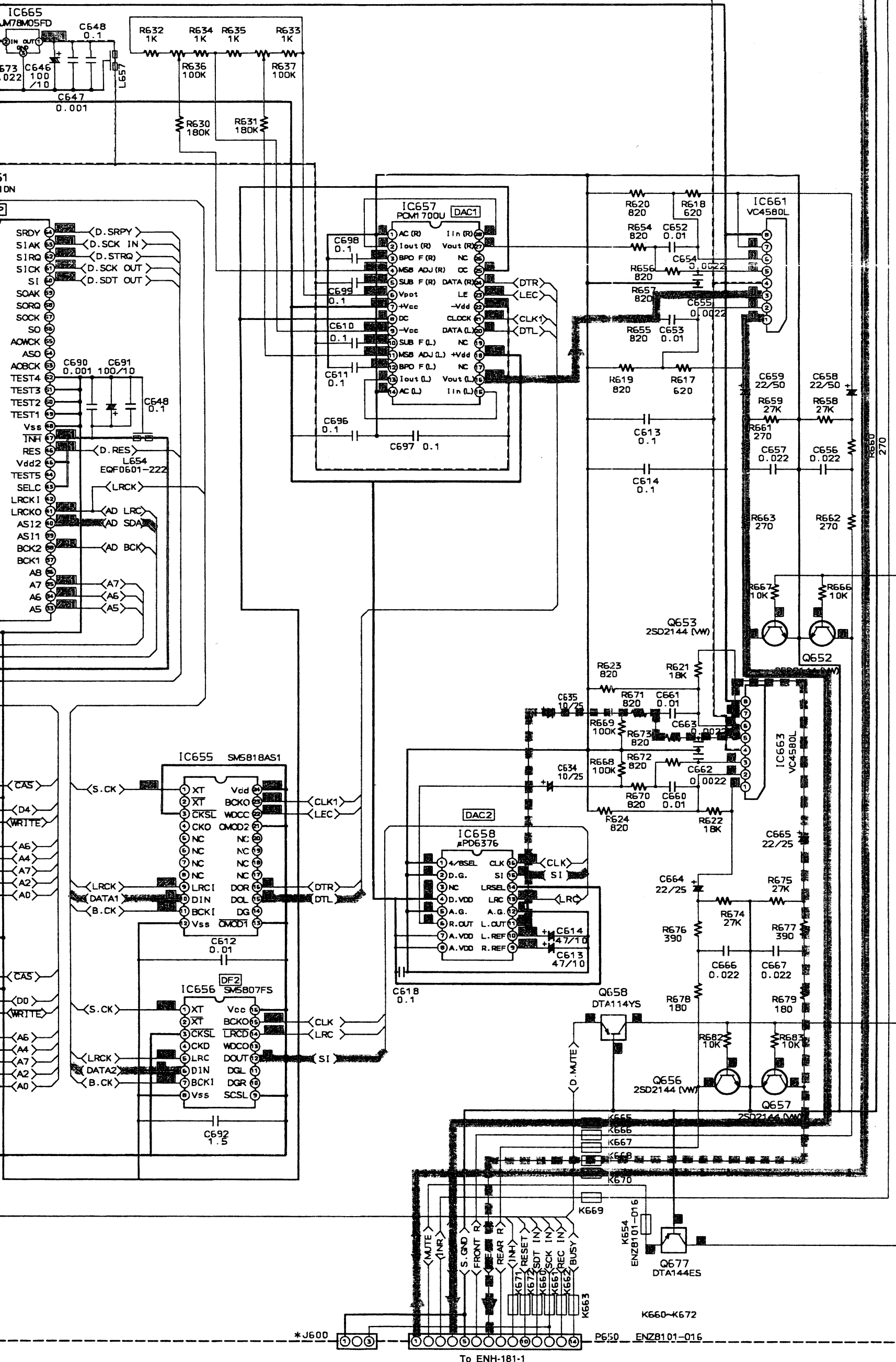
3. TWIN BASS & Power Amplifier Section



2. DAP Section

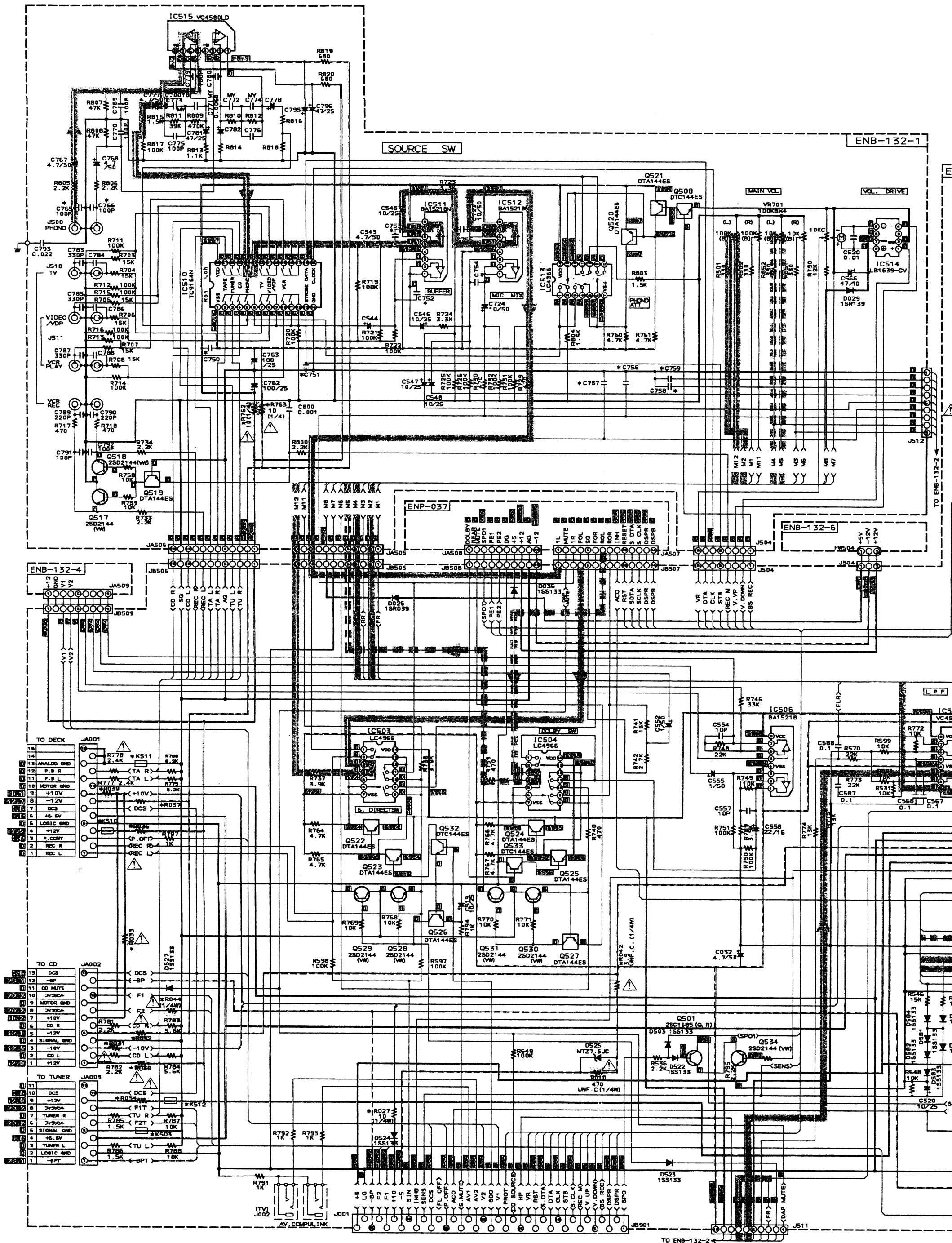


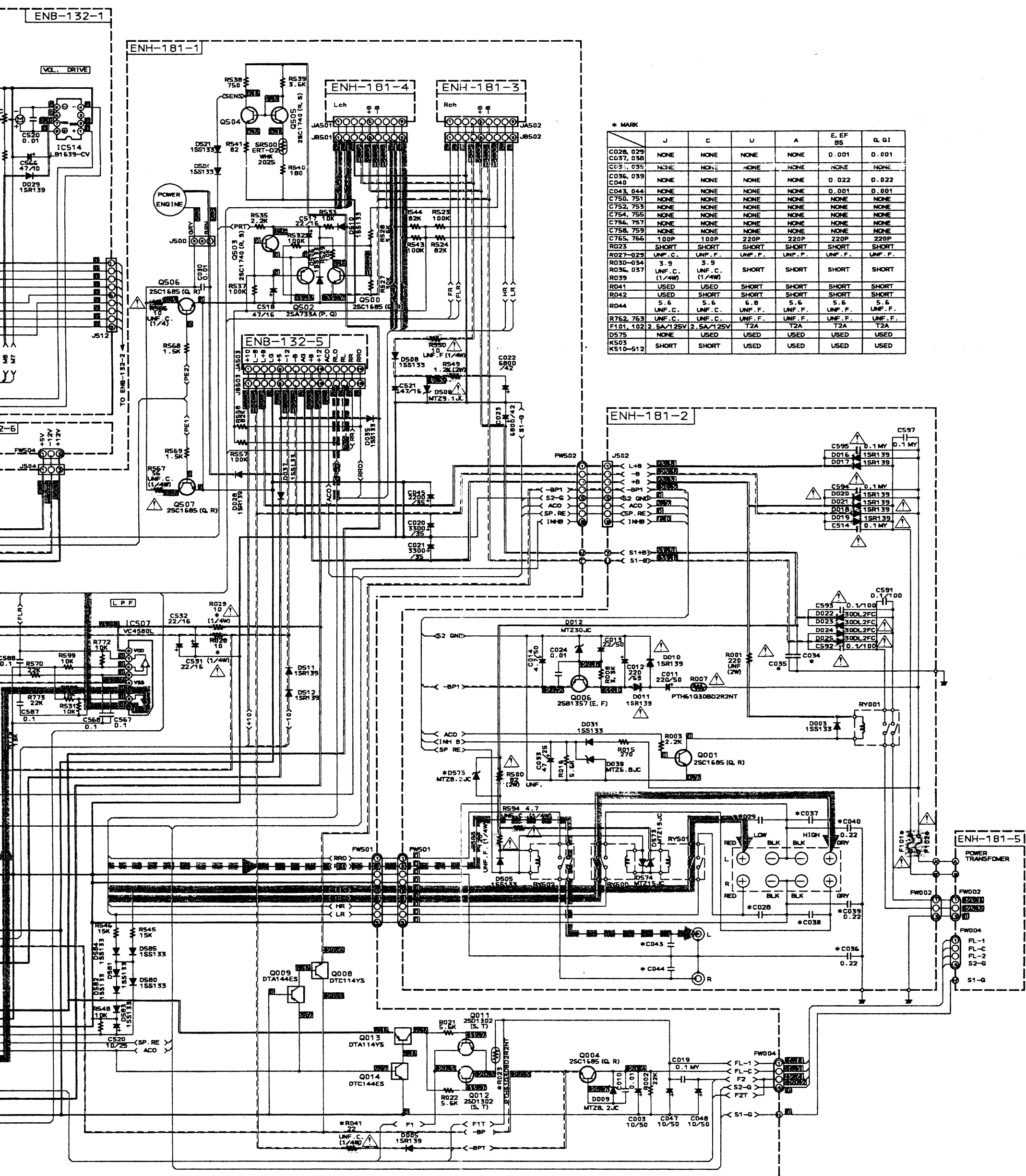
	J. C	E. EK A, BS	G. GI	U
J600	NONE	USED	USED	USED



Schematic Diagrams

1. Source Select & Speaker Terminal Section






AX-MX90BK

JVC

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